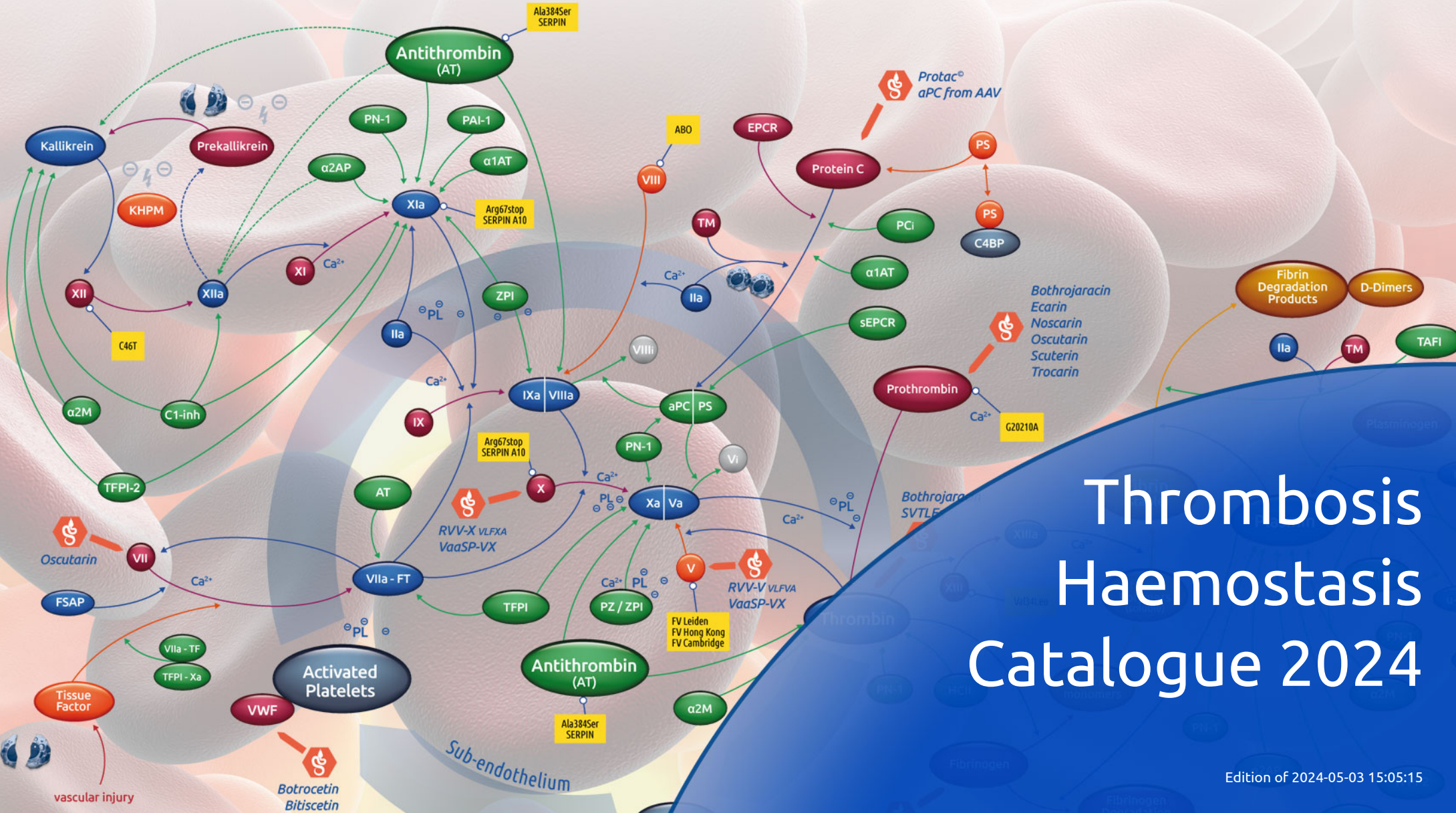


# Cryopep

Cryogenics at the service of haemostasis



## Thrombosis Haemostasis Catalogue 2024

We offer medical analysis laboratories **an innovative concept** through a range of **ready-to-use** frozen plasmas and reagents, of unprecedented quality comparable to that of plasmas from healthy donors.

This quality is obtained by selecting our raw materials with a high degree of requirement and then offering them in **frozen format without any additives.**

This solution eliminates the lyophilization steps and therefore the resulting deterioration, and at the same time improves the preanalysis **by avoiding reconstitution errors.**

We have taken care to also offer **a range of plasmas and lyophilized reagents.** They will provide a complementary offer in their presentation and quality to frozen products.

### **Saving**

Practical packaging.  
Conditioning of 0.5 to 4 mL.  
Using more than 90 % of product (very little dead volume).

### **Quality assurance**

Products are ready to use, eliminating the risk of error associated with reconstitution.  
CE and FDA, ISO 13485.

### **Our technical support**

We are committed to help you to ensure the quality of your results at your laboratory.  
To help you better, we are able to bring you our support for the evaluation of our products by writing us at : [support@cryopep.com](mailto:support@cryopep.com)

### **Time saving**

Ready to use products after 5 minutes of thawing at 37°C : gain of 25 minutes over the reconstitution of a lyophilized reagent, which requires 30 minutes of stabilization.

### **Quality Products**

Plasmas collected by plasmapheresis.  
No dry freeze, therefore no alteration of intrinsic qualities of plasmas.  
No additives.

## The company

Specialized in the field of haemostasis, Cryopep offers a new alternative to traditional lyophilized reagents by providing clinical laboratories an innovative range of ready to use reagents.

The company is based in Montpellier (Fr) in the heart of a bustling business park and benefits from this dynamic environment to carry out all its activities.

Since its creation in 2008, the company has expanded operations and now serves the French territory and some European countries. The growth experience by the company is due mainly to the sale of frozen reagents for diagnostic and research use.

Our products are in compliance with current regulations (FDA and CE marking, ISO 13485). The growth experience by the company is due mainly to the sale of frozen reagents for diagnostic and research uses.

## Why choose Cryopep over another ?

### **Frozen reagents, simplicity and practicability.**

We offer medical analysis laboratories an innovative concept through a range of ready-to-use frozen plasmas and reagents of unprecedented quality, comparable to that of fresh donor plasmas.

### **A full range of haemostasis reagents.**

Ready-to-use frozen reagents that avoid reconstitution errors.

A range of plasmas and lyophilized reagents that provide additional offers reagents.

A range of research reagents of over 720 references.

### **Proven quality.**

ISO 13485 and ISO 9001 standards from manufacturers.

Innovative high quality reagents that offer time saving and be practicable. Get technical support from hemostasis specialists.

### **A reliable logistics system.**

Your products are carefully packed. We work exclusively with carriers receiving ISO 9001 standard and CERTIPHARM repository.

Guarantee of an effective monitoring and a fast delivery of your order.





Cryopep is the exclusive distributor in France of the Canadian company BioMedica Diagnostics. In December 2016, BioMedica Diagnostics acquired the specialized coagulation product line from Sekisui Diagnostics. The products remain unchanged, but the illustrations / brand are different. BioMedica brings innovative, affordable and quality diagnostic solutions to a growing group of international partners, whose goal is to improve patient outcomes in the areas of hemostasis and thrombosis.

<https://biomedicadiagnostics.com/>



Cryopep is the distributor in France of the Swiss company Pentapharm. Pentapharm is active in two main markets; Diagnostics and Pharma in several countries. Pentapharm specializes in the field of hemostasis to develop new applications or improve existing ones. The company is certified according to ISO 9001 and ISO 13485.

<https://www.pentapharm.com/>



Cryopep is the exclusive distributor in France of the Spanish company GEN inCode. Le but de GEN inCode is to promote diagnostic tests through prognosis and prediction based mainly on genomics, proteomics, metabolomics and bioinformatics technologies.

<https://www.genincode.com/>



Cryopep is the exclusive distributor in France of the American company Prolytix. Prolytix formerly Haematologic Technologies specializes in the preparation of high quality proteins, enzymes, deficient plasmas, antibodies and special collection tubes for research use. Its internal quality system is certified according to ISO 9001 standards.

<https://www.goprolytix.com/>



Cryopep is the exclusive distributor in France of the German company LOXO. LOXO develops, produces and distributes in vitro diagnostics (IVD) for medical diagnostic laboratories and laboratory reagents for industrial and scientific purposes.

<https://www.loxo.de/>



Cryopep is the exclusive distributor in France, the Netherlands, Belgium, Luxembourg and Spain of the Canadian company Precision BioLogic Inc. This is specialized in the production of innovative products through a range of plasmas and frozen reagents. Its internal quality system, which follows the highest industry standards, is ISO 13485 registered (the industry standard for medical diagnostics) and manufactured under FDA quality system regulations. The products are registered according to the CE mark of the European Economic Community.

<https://www.precisionbiologic.com/>



Cryopep is the exclusive distributor in France of the Swedish company Rossix. The Rossix company specializes in the development of colorimetric assays for hemostasis factors for use in the pharmaceutical industries and expert laboratories.

<https://www.rossix.com/>



Cryopep is a distributor in France of the company fzmb.

fzmb GmbH, Research Center for Medical Technology and Biotechnology located in Germany. Founded in 1994 by biotechnologists, engineers and physicians, the company today develops and manufactures innovative, high-quality diagnostic products for laboratory and point-of-care applications.

<https://www.fzmb.de/>



Cryopep is the exclusive distributor in France of the Austrian company Technoclone. It specializes in the production of diagnostic kits for hemostasis and has a very extensive ELISA range. Diagnostic products are registered according to the CE mark of the European Economic Community.

<https://www.technoclone.com/>



Cryopep is the exclusive distributor in France of the registered trademark ZACROS. The CRYOPEP company markets in France of the T-TAS device from the Japanese company Fujimori Kogyo designed for use in clinical biology and / or research laboratories for the purpose of qualitatively analyzing the process of formation of a thrombus involving the adhesion of platelets using whole blood samples taken from a tube containing the anticoagulant BAPA in the flow condition. The company is certified according to ISO 13485 standards.

<https://www.t-tas.info/>

# Ready to use, simple and convenient

CRYOPEP plasmas and reagents can be adapted to most automatic analyzers. Once ready, they avoid any reconstitution and therefore any handling error, ensuring reliable results.

Making the lab work simple and convenient is especially important when facing frequent personnel changes. This provides lab professionals a real improvement to the preanalytical conditions and guarantees everyone's peace of mind.

## 1 To order, several possibilities

By telephone	+33(0)4 67 10 71 20
By fax	+33(0)4 67 10 71 21
By e-mail	contact@cryopep.com
By letter	CRYOPEP, 83 rue Yves Montand, 34 080 Montpellier, FRANCE

## 2 Command Processing

We carefully pack frozen products in boxes with dry ice or cold packs according to the nature of the product.

To optimize the conditions of transport of our products, we ship our packages in dry ice only from Monday to Wednesday, except urgent customer requests.

All other orders for freeze-dried products are shipped from Monday to Friday.

## 3 Transport

We work exclusively with carriers receiving ISO 9001 and CERTIPHARM certifications.

We guarantee timely delivery of all products.

During transportation, we track all our shipments and, if necessary, call our customers to check that the packages have been received in the laboratory.



# SUMMARY

## NORMAL HUMAN POOLS

POOLED NORMAL PLASMA  
NORMAL SERUM POOL

## INDIVIDUALS PLASMAS

NORMAL DONOR PLASMAS  
DONOR PATHOLOGICAL PLASMAS

## SCREENING TESTS

PT APTT FIBRINOGEN TT

## FROZEN CALIBRATORS AND CONTROLS

SPECIALTY CALIBRATORS  
WEAK CONTROLS  
SPECIALTY CONTROLS  
AVK  
SCREENING TEST CONTROLS

## LYOPHILIZED CALIBRATORS AND CONTROLS

SPECIALTY CALIBRATORS  
SPECIALTY CONTROLS  
AVK  
SCREENING TEST CONTROLS

## FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

EXTRINSIC PATHWAY  
FACTOR II  
FACTOR V  
FACTOR VII  
FACTOR X  
INTRINSIC PATHWAY  
FACTOR VIII  
FACTOR VIII avec VWF  
FACTOR IX  
FACTOR XI  
FACTOR XII  
PREKALLIKREIN

## LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

EXTRINSIC PATHWAY  
FACTOR II  
FACTOR V  
FACTOR VII  
FACTOR X  
INTRINSIC PATHWAY  
FACTOR VIII  
FACTOR XIII  
KININOGEN

## LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

INTRINSIC PATHWAY  
FACTOR VIII  
FACTOR IX  
FACTOR XI  
FACTOR XII  
PREKALLIKREIN

## INHIBITOR NIJMEGEN BETHESDA ASSAYS

FVIII INHIBITOR NIJMEGEN BETHESDA ASSAYS  
FVIII INHIBITOR NIJMEGEN BETHESDA CONTROLS  
FIX INHIBITOR NIJMEGEN BETHESDA CONTROLS

## ANTICOAGULANT MONITORING

ANTI-Xa  
ORGARAN®  
ARIXTRA®  
UFH  
ANTI-Xa ASSAYS  
LMW  
ANTI-IIa  
HEPARIN NEUTRALIZATION  
ANTI-IIa ASSAYS  
DOAC  
EDOXABAN  
DABIGATRAN  
ARGATROBAN  
RIVAROXABAN  
DOAC NEUTRALIZATION

APIXABAN

## LUPUS DIAGNOSTICS (LA)

HPPNA  
dPT  
PNP  
POSITIVE CONTROL  
dRVVT  
NEGATIVE CONTROL  
WEAK POSITIVE CONTROL

## D-DIMERS

ELISA  
LATEX

## FACTOR ASSAYS

CHROMOGENIC ASSAYS  
PROTHROMBIN  
FACTOR VIII  
FACTOR IX  
FACTOR XIII  
TISSUE FACTOR  
TAFI  
TFPI

## ACTIVATED FACTOR ASSAYS

CHROMOGENIC ASSAYS  
FACTOR VIIa  
FACTOR IXa  
FACTOR XIa  
ACTIVATION MARKERS  
THROMBIN  
PROTEIN C

## THROMBOPHILIA

FACTOR V LEIDEN / APCR  
ANTITHROMBIN  
GENETIC PANEL  
C1-INHIBITOR  
PROTEIN C

PROTEIN S  
TISSUE FACTOR

→ THE COAGULATION CASCADE

#### ADAMTS-13

ADAMTS-13 ACTIVITY  
ADAMTS-13 ANTIGEN  
ADAMTS-13 INHIBITORS  
ADAMTS-13 ACTIVITY ANTIGEN  
ADAMTS-13 UNIT ACTIVITY

→ TERMS AND CONDITIONS

#### VON WILLEBRAND FACTOR

VWF ANTIGEN  
VWF PROPEPTIDE ANTIGEN  
VWF : COLLAGEN BINDING ASSAYS

→ ALPHABETICAL INDEX

#### FIBRINOLYSIS

FIBRONECTIN, VITRONECTIN  
GLU-PLASMINOGEN, D-DIMERS  
TISSUE PLASMINOGEN ACTIVATOR  
ANTIGEN  
t-PA ANTIGEN  
t-PA – PAI-1 COMPLEX  
UROKINASE PLASMINOGEN ACTIVATOR  
PLASMIN ANTIPLASMIN COMPLEX  
PLASMINOGEN ACTIVATOR INHIBITOR

→ REFERENCE INDEX

#### THROMBIN GENERATION

TGT (TGA)

#### AUXILIARY REAGENTS

NEUTRALIZERS  
BUFFERS, CaCl<sub>2</sub>, BSA

#### INSTRUMENTS

T-TAS®01  
INSTRUMENT  
CONSUMABLES PL CHIPS  
CONSUMABLES AR CHIPS - T-TAS® 01  
CONSUMABLES HD CHIPS - T-TAS® 01



These kits are manufactured in accordance with the 98/79 EC directive for in vitro diagnostic devices. Only CE marked products can be used for diagnostic applications in Europe.



These kits are intended for in vitro diagnostic use.



These kits are for research use only and are not intended to be used for diagnostic procedures.



Federal Drug Administration, FDA validates diagnostic kits for in vitro diagnostic use in the United States.



Biological risk products



Storage between 2 and 8 ° C



Reactive in liquid form



Reactive in lyophilized form



Reactive in frozen form



Stability after opening at 2-8 ° C



Products that can be refrozen



Stability 12 months after refreezing at -20 ° C



Manufacturer



Importer



Distributor

# NORMAL HUMAN POOLS

## POOLED NORMAL PLASMA

POOL OF NORMAL PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Pooled Normal Plasma



## Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 1 Reference Control



CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Donor Set

Plasma from 50 healthy donors

Reference	Presentation	Format	Number of tests
CCN-10	Kit	80 x 1.0 mL	800
CCN-15	Kit	80 x 1.5 mL	1 200
CCN-40	Kit	81 x 4.0 mL	3 280



### Fresh frozen citrated normal human plasma pool.

CRYOcheck™ Pooled Normal Plasma consists of a minimum of 20 normal plasmas pool in platelets, collected with great care by plasmapheresis from healthy male and female donors between 18 and 66 years old. The result is a very high quality pool representing a "normal" pool.

This plasma pool is buffered using HEPES buffer, aliquoted, and rapidly frozen.

## Components

- cryotubes x 1 mL, 1.5 mL or 4 mL of frozen plasma

## Advantages

- Citrated plasma
- No bovine additives or preservatives
- No reconstitution error
- Ready to use after thawing (4 min at 37 °C)
- Color coded for better viewing
- Alternative to collection directly in the laboratory
- Can be used as normal plasma

## Characteristics

- Collection by plasmapheresis
- Flash freezing under nitrogen
- Plasmas negative for all tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging suitable for all STA-R type micro-cup supports
- Certificate of analysis supplied with each batch



## NORMAL HUMAN POOLS

## NORMAL SERUM POOL

NORMAL SERUM POOL

Fresh frozen serum



## Pool of fresh serum from healthy donors



## Associated products

Normal donor serum

Reference	Presentation	Format
6-SPOOL	Kit	10 x 1.0 mL
6-SPOOL-350	Kit	10 x 0.35 mL



## Informations

The serum is freed from coagulation factors and fibrinogen.

It is obtained by sampling on dry tubes without anticoagulant.

## Pool of fresh frozen normal human sera.

The serum pool is collected with great care from healthy male and female donors without drug treatment between 18 and 66 years old. The result is a very high quality product.

## Components

- 10 cryotubes x 0.35 mL or 1 mL

## Advantages

- Normal human serum, pool of at least 20 sera from at least 20 different healthy donors, decanted, centrifuged and frozen within 3 hours of collection.
- Packaging in plastic cryotubes.

## Characteristics

- No additives or preservatives
- No reconstitution error
- Ready to use after thawing (3 min at 37 ° C) for 1 mL tubes
- This plasma is stable, if stored at -40 to -80 ° C, until the end of the month of the expiration date indicated on the package
- Quality control : example : dosage of the complement

# INDIVIDUALS PLASMAS

## NORMAL DONOR PLASMAS

NORMAL INDIVIDUAL PLASMAS

Fresh frozen plasmas



## Plasma from 50 healthy donors



### Associated products

Pool of fresh plasma from healthy donors



CRYOcheck™ Normal Donor Set



Normal donor citrated plasma (vol > 50mL)

Reference	Presentation	Format
7-CCNS-50	Kit	50 x 1.0 mL

### Normal plasmas from healthy adult donors.

The kit is made up of 50 separate plasma vials, collected with great care on 3.2% citrated tubes from healthy individual donors, men and women without drug treatment between 18 and 66 years old.

The result is a very high quality product that truly represents a sample of a "normal" population. Each plasma is verified as having a normal coagulation profile in hemostasis. The proportion between the number of male and female donors may vary depending on the batch.



### Components

- 50 cryotubes x 1 mL of frozen plasma

### Advantages

- Ready to use after thawing (4 min at 37 °C)

### Characteristics

- This plasma is stable, if stored between -40 °C and -80 °C.
- Checked negative for all serology tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C

# INDIVIDUALS PLASMAS

## NORMAL DONOR PLASMAS

NORMAL INDIVIDUAL PLASMAS

Fresh frozen plasmas



## CRYOcheck™ Normal Donor Set

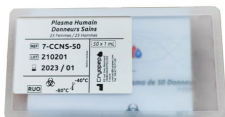


### Associated products

Pool of fresh plasma from healthy donors



Normal donor citrated plasma (vol > 50mL)



Plasma from 50 healthy donors

Reference	Presentation	Format
CCNS-10	Kit	25 x 1.0 mL

### Normal plasmas from individual donors.

The CRYOcheck™ Normal Donor Set consists of 25 separate plasma vials, collected with great care from healthy individual male and female donors without drug treatment between 18 and 66 years of age.

The result is a very high quality product that truly represents a sample of a "normal" population. Each plasma is verified as having a normal coagulation profile in hemostasis.



### Components

- 25 cryotubes x 1 mL of frozen plasma

### Advantages

- No bovine additives or preservatives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Ready to use after thawing (4 min in a water bath at 37 °C)
- Packaging in plastic cryotubes suitable for all STA-R type micro-cup supports

### Characteristics

- Results may vary depending on reagents and instrument used
- Kits can be ordered in multiples of 25 aliquots
- Flash freezing under nitrogen
- Checked negative for all serology tests required by the FDA Compact, color-coded boxes for easier identification in freezers
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

## INDIVIDUALS PLASMAS

### DONOR PATHOLOGICAL PLASMAS

## INDIVIDUAL PATHOLOGICAL PLASMAS

# CRYOcheck™ CorPac™

Fresh frozen plasmas



Reference	Presentation	Format
CCCP-15	Kit	30 x 1.5 mL

### Separate normal and abnormal plasmas.

The CRYOcheck™Corpac™ consists of 30 individual donor vials containing human plasma with a distinct profile for TP, TCA and fibrinogen with normal and pathological values. The composition of the boxes may vary according to needs.



### Components

- 30 cryotubes x 1.5 mL of frozen plasma

### Advantages

- No bovine additives or preservatives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Ready to use after thawing (4 min in a water bath at 37°C)
- Checked negative for all serology tests required by the FDA Compact, color-coded boxes for easier identification in freezers
- Packaging in plastic cryotubes suitable for all STA-R type micro-cup supports

### Characteristics

- Flash freezing under nitrogen
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C

## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

## TECHNOPLASTIN® HIS

Chronometric assay



## Associated products

AK-Calibrant  
 Coagulation Control A  
 Coagulation Control AK  
 Coagulation Control N  
 Coagulation Reference  
 TECHNOCLOT® Control A  
 TECHNOCLOT® Control N

Reference	Presentation	Format
4-5003009	Vial	12 x 2.0 mL
4-5003021	Vial	20 x 10.0 mL
4-5003026	Vial	6 x 10.0 mL
4-5003030	Vial	2 x 10,0 mL



### Thromboplastin calcium for the determination of prothrombin (PT), prothrombin time (PT) and INR (ISI around 1.2).

TECHNOPLASTIN® HIS (HIS = Heparin InSensitive) is a routine hemostasis test composed of standard thromboplastin calcium based on rabbit brain.

## Informations

Prothrombin Time (PT) is the measurement of the clotting time of citrate plasma by the addition of excess calcium tissue thromboplastin. The test explores the "extrinsic" coagulation pathway (factor VII, X,V,II) and the conversion of fibrinogen to fibrin.

## Characteristics

This reagent is characterized by its sensitivity to FII, FV, FVII and FX. It also contains a heparin neutralizer which allows the determination of the PT in the plasmas of patients under conventional heparin therapy (0.2 to 0.8 IU / mL). This screening test is used for :

- control of coagulation disorders of the extrinsic pathway,
- control of oral anticoagulation therapy,
- the determination of the individual factors of the extrinsic pathway,
- checking the synthesis capacity of coagulation factors in the event of liver disease.

Therapeutic range of oral anticoagulants : INR 2.0 - 4.5 equivalent to 20 - 45% of the norm.



## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

Prothrombine Time



## TECHNOCLOT® PT Owren Manual



## Associated products

AK Verification Kit

TECHNOCLOT® PT Owren Capillary Calibration Set

TECHNOCLOT® PT Owren Capillary Control Set

AK-Calibrant

Coagulation Control A

Coagulation Control AK

Coagulation Control N

Coagulation Reference

Reference	Presentation	Format
4-5005032	Kit	10 x 4.0 mL
4-5005037	Kit	10 x 10 mL



**TECHNOCLOT® PT Owren manual is a thromboplastin reagent for the quantitative determination of prothrombin time (PT) in citrated human plasma, capillary blood and venous blood.**

This reagent is sensitive to abnormal levels of coagulation factors II, VII and X. It is used for the control of blood clotting disorders of the extrinsic system as well as for monitoring oral anticoagulant therapy (i.e. warfarin).

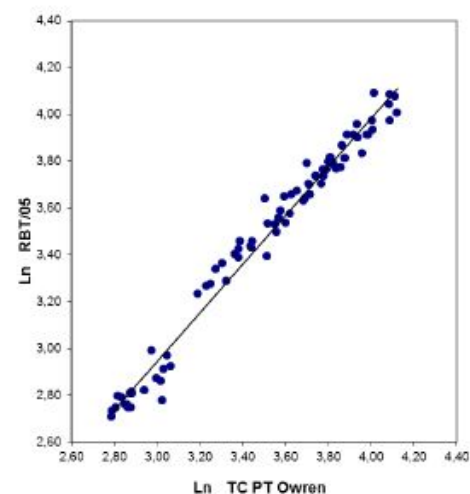
## Informations

Prothrombin time (PT) is a measure of the clotting time of citrated plasma by addition of excess calcium tissue thromboplastin.

The test explores the "extrinsic" pathway of coagulation (factor VII, X, V, II) as well as the conversion of fibrinogen into fibrin.

## Components

- 10 vials x 4 or 10 mL



## Advantages

- Combined thromboplastin that already contains CaCl<sub>2</sub>.
- TECHNOCLOT® PT Owren manual was compared in studies to other reagents on the market and shows very good correlation data.

## Characteristics

TECHNOCLOT® PT Owren manual is specially designed for use with manual methods and semi-automated coagulometers. The reagent is lyophilized and contains rabbit brain thromboplastin and adsorbed bovine plasma. The adsorbed plasma is added as a source of factor V and fibrinogen.

## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

Prothrombine Time



## TECHNOCLOT® PT Owren Automated



## Associated products

AK-Calibrant  
Coagulation Control A  
Coagulation Control AK  
Coagulation Control N  
Coagulation Reference  
Imidazole buffer

Reference	Presentation	Format
4-5005044	Kit	10 x 4.0 mL
4-5005046	Kit	10 x 10 mL

**TECHNOCLOT® PT Owren automated is a thromboplastin reagent for the quantitative determination of Prothrombin Time (PT) in human citrated plasma.**

This reagent is sensitive to abnormal levels of the coagulation factors II, VII and X and is used for the monitoring of oral anticoagulant therapy (i.e. warfarin). TECHNOCLOT® PT Owren automated is especially designed to be used with coagulation analyzers including ones using optical PT determination.



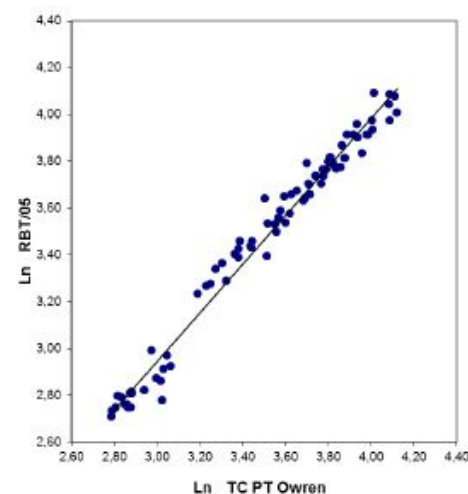
## Informations

Prothrombin time is a measure of the clotting time of citrated plasma by addition of excess calcium tissue thromboplastin.

The test explores the "extrinsic" pathway of coagulation (factor VII, X, V, II) as well as the conversion of fibrinogen into fibrin.

## Components

- 10 vials x 4 or 10 mL



## Advantages

- Application sheets for automatic analysers are available on request.
- Contains handling and performance information specific to the analyzer and test.

## Characteristics

Le réactif est lyophilisé et contient de la thromboplastine cérébrale de lapin et du plasma bovin adsorbé.

Le plasma adsorbé est ajouté comme source de facteur V et de fibrinogène.

Une solution de chlorure de calcium de 25 mM doit être ajoutée pour déclencher la réaction de coagulation.

## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CALIBRATORS

Prothrombin Time



# TECHNOCLOT® PT Owren Capillary Calibration Set



## Associated products

TECHNOCLOT® PT Owren Automated

TECHNOCLOT® PT Owren Capillary Control Set

TECHNOCLOT® PT Owren Manual

## Informations

Prothrombin time is the measurement of the clotting time of citrate plasma by adding an excess of calcium tissue thromboplastin.

The test explores the "extrinsic" route of coagulation (factor VII, X,V,II) as well as the conversion of fibrinogen to fibrin.

Reference	Presentation	Format
4-5005100	Kit	4 x 1.0 mL

**TECHNOCLOT® PT Owren Capillary Calibration set is used to establish an INR Reference curve for capillary blood INR tests.**

A set of 4 freeze-dried calibration plasmas for standardisation and calibration of INR capillary blood tests using TECHNOCLOT® PT Owren Manual.



## Components

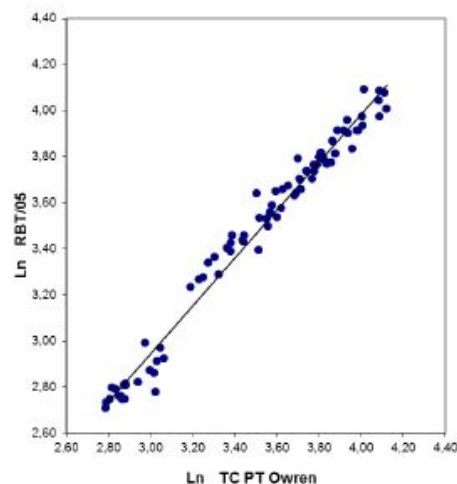
- 1 vial of 1 mL of lyophilised normal plasma
- 3 vials of 1 mL of lyophilised anticoagulated plasma with calibrated INR values
- 4 vials of 1 mL of distilled water
- 4 vials of 1 mL of CaCl<sub>2</sub>

## Advantages

- Simple to use - CaCl<sub>2</sub> and distilled water included in the set
- INR's of patient samples can be direct read off from the calibration curve
- Suitable for use with TECHNOCLOT® PT Owren Manual and other PT systems

## Characteristics

Set contains both a normal and 3 warfarinised plasmas with calibrated INR values. TECHNOCLOT® PT Owren Capillary Calibration Set est utilisé en complément du réactif TECHNOCLOT® PT Owren Manual.





## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CONTROLS

Prothrombine Time



## TECHNOCLOT® PT Owren Capillary Control Set



## Associated products

TECHNOCLOT® PT Owren Automated

TECHNOCLOT® PT Owren Capillary Calibration Set

TECHNOCLOT® PT Owren Manual

## Informations

Prothrombin time is the measurement of the clotting time of citrate plasma by adding an excess of calcium tissue thromboplastin.

The test explores the "extrinsic" pathway of coagulation (factor VII, X,V,II) as well as the conversion of fibrinogen to fibrin.

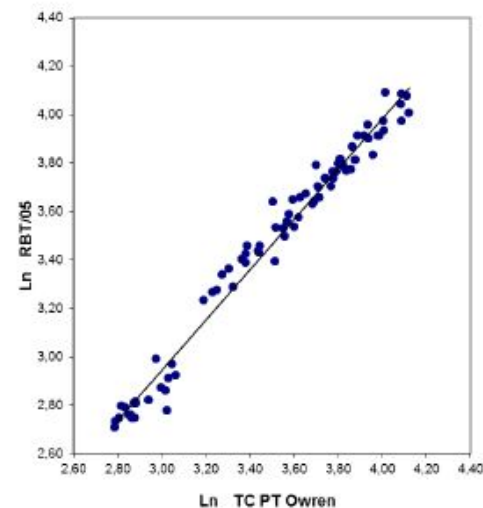
Reference	Presentation	Format
4-5005102	Kit	2 x 1.0 mL

**TECHNOCLOT® PT Owren Capillary Control Set is used for precision and precise control of capillary blood INR tests.**

Consists of a normal freeze-dried plasma and an anticoagulated plasma used to determine the accuracy and accuracy of INR tests.

## Components

- 1 vial x 1 mL Capillary Control N
- 1 vial x 1 mL Capillary Control AK
- 2 vials x 1 mL distilled water
- 2 vials x 1 mL CaCl<sub>2</sub>



## Advantages

- Simple to use - CaCl<sub>2</sub> included in the set.
- Excellent stability once restored.

## Characteristics

- A set of normal and anticoagulated freeze-dried plasmas designed to control capillary blood INR tests.
- Normal plasma is prepared from selected citrated plasma from healthy donors so that coagulation activity is normally distributed.
- Abnormal plasma is prepared from donor plasma stabilized on long-term warfarin treatment with the same coagulation levels Factors II, VII and X plus PIVKA proteins present in the patient's plasma.
- TECHNOCLOT® PT Owren Capillary Control Set is used as a supplement to the TECHNOCLOT® PT Owren Manual reagent.



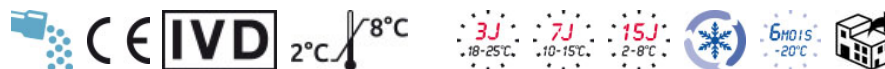
# SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

### DAPTTIN® TC

Chronometric assay



#### Associated products



AK-Calibrant



Coagulation Control A



Coagulation Control AK

Coagulation Control N

Coagulation Reference

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFHSolution CaCl<sub>2</sub> 25 mM

TECHNOCLOT® Control A

TECHNOCLOT® Control N

Reference	Presentation	Format
4-5035060	Vial	5 x 2.0 mL
4-5035090	Vial	6 x 10.0 mL
4-5035100	Vial	20 x 10.0 mL

**TCA reagent to detect deficiencies of coagulation factors II, V, VIII, IX, X, XI and XII, lupus anticoagulants and to monitor patients during treatment with heparin.**

Dapttin® TC reagent (2-activator cephalin) is a reactive for activated partial thromboplastin time (TCA) standardized in hemostasis, composed of 2 surface activators : kaolin and sulfatide, and a mixture of highly purified phospholipids.

This routine test is distinguished by an optimized behavior with regard to all coagulation factors and inhibitors.

#### Components

- 5 vials x 2 mL or 6 or 20 vials of 10 mL lyophilized reagent

Sensibilité aux facteurs  
Sensibilité aux L.A.  
Sensibilité aux héparines

	Réactif		
	DAPTTIN® TC	SIRON LS (Lupus Sensitive)	SIRON LIS (Lupus Insensitive)
Sensibilité aux facteurs	++	++	+++
Sensibilité aux L.A.	++	+++	+
Sensibilité aux héparines	++	++	++

#### Characteristics

Linearity :  
FVIII : 0.8 - 100%  
FIX : 0.8 - 100%  
FXI : 1.6 - 200%  
FXII : 6.25 - 200%

Detection limit :  
Heparin :  
UFH 1IU / mL  
Heparin ≤1IU / mL  
LMW ≤ 3IU / mL  
Triglyceride : none up to 500 mg / dL  
Bilirubin : none up to 0.4 mg / dL



# SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

### Siron LS (aPTT liquid)

Chronometric assay



#### Associated products



AK-Calibrant



Coagulation Control A



Coagulation Control AK

Coagulation Control N

Coagulation Reference

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFHSolution CaCl<sub>2</sub> 25 mM

TECHNOCLOT® Control A

TECHNOCLOT® Control N

Reference	Presentation	Format
4-5035105	Vial	2 x 4.0 mL
4-5035107	Vial	10 x 4.0 mL
4-5035109	Vial	10 x 10.0 mL

**Reagent for activated partial thromboplastin time, liquid TCA, ready to use, to detect deficiencies in coagulation factors II, V, VIII, IX, X, XI and XII, lupus anticoagulants and to monitor patients on treatment with unfractionated heparins. It is insensitive to FVII and FXIII.**

#### Components

- 2 or 10 vials x 4 mL or 10 vials of 10 mL liquid reagent

#### Advantages

- Siron LS reagent is a TCA reagent standardized in hemostasis, composed of ellagic acid as a surface activator and a mixture of highly purified phospholipids stable in aqueous solution.

- This routine test is distinguished by an optimized behavior with regard to all coagulation factors and inhibitors.

#### Characteristics

Siron LS is to be used :

- as a screening assay for the intrinsic pathway of coagulation
- in the diagnosis and treatment of hemophilia A and B
- for the specific determination of FVIII, FIX, FX, FXI, FXII
- as a control for heparin therapy for LA detection

It is not very sensitive to FVII and FXIII.

	Réactif		
	DAPPTIN® TC	SIRON LS (Lupus Sensitive)	SIRON LS (Lupus Insensitive)
Sensibilité aux facteurs	++	++	+++
Sensibilité aux L.A.	++	+++	+
Sensibilité aux héparines	++	++	++

# SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

### Siron LIS (aPTT liquid)

Chronometric assay



#### Associated products



AK-Calibrant



Coagulation Control A



Coagulation Control AK

Coagulation Control N

Coagulation Reference

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFHSolution CaCl<sub>2</sub> 25 mM

TECHNOCLOT® Control A

TECHNOCLOT® Control N

Reference	Presentation	Format
4-5035118	Vial	2 x 4.0 mL
4-5035119	Vial	10 x 4.0 mL
4-5035121	Vial	10 x 10.0 mL

**Siron LIS (LIS = Lupus InSensitive) is a liquid reagent for the assay of activated cephalin time (TCA) with low sensitivity to lupus anticoagulants.**

#### Components

- 2 or 10 vials x 4 mL or 10 vials of 10 mL liquid reagent

#### Advantages

- Siron LIS is distinguished by its very long stability after reconstitution.  
- The correlation  $R^2 = 0.9577$  was obtained by comparing it with Actin® FS.

#### Characteristics

Siron LIS is a liquid preparation of an aqueous and stable suspension of phospholipids. The activation of FXII is carried out from ellagic acid contained in this routine test in hemostasis.

Siron LIS (lupus insensitive) is to be used :

- as a screening test for the intrinsic coagulation system,
- for specific determinations of FVIII, FIX, FXI and FXII ,
- in combination with the corresponding, deficient plasma, as a control of heparin treatments.

	Réactif		
	DAPPTIN® TC	SIRON LIS (Lupus Sensitive)	SIRON LIS (Lupus InSensitive)
Sensibilité aux facteurs	++	++	+++
Sensibilité aux L.A.	++	+++	+
Sensibilité aux héparines	++	++	++



## SCREENING TESTS

## PT APTT FIBRINOGEN TT

## CONTROLS

## Thrombin Reagent



## Associated products

Coagulation Control A

Coagulation Control N

## Informations

Thrombin time measurement is the time it takes for a fibrin clot to form after reagent addition, results are reported in seconds. If the clotting time of a sample is prolonged beyond the reference range, the level or activity of fibrinogen is low or thrombin inhibitors may be present.

Thrombin time is used :

- to qualitatively detect fibrinogen abnormalities.
- to assess the effectiveness of fibrinolytic treatment.

Reference	Presentation	Format
4-5100005	Kit	6 x 6.0 mL

**Plasma for the determination of thrombin time (TT).**

Standardized reagent for the determination of thrombin time.

## Components

- 6 vials x 6 mL of lyophilized plasma

## Advantages

- Adaptable to analyzer
- Allows a large number of tests to be carried out

## Characteristics

This reagent is standardized for the time of thrombin produced from bovine thrombin for the normal and therapeutic ranges (heparin and fibrinolytic).



## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

## Fibrinogen Reagent Kit

Chronometric assay



## Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

TECHNOCLOT® Control A

TECHNOCLOT® Control N

Reference

4-5138005

Presentation

Kit

Number of tests

45

**Fibrinogen assay based on the (modified) Clauss method.**

For this routine hemostasis test, the clotting time of the diluted citrated plasma is determined in the presence of excess thrombin ( $\approx 80$  IU / mL) and a reaction accelerator.



## Informations

Fibrinogen (Factor I) is a plasma soluble glycoprotein that is synthesized by the liver at a size of 340 kDa and circulating at a concentration of 2.6 to 3 mg/mL.

Fibrinogen is a dimer bound by disulfide bridges composed of 3 pairs of polypeptide chains not identical. Under the action of thrombin, fibrinogen is converted into fibrin. In combination with FXIII, calcium ions, fibrin forms a stable network that ensures coagulation.

## Components

- 5 vials x 2 mL lyophilized reagent
- 1 vial x 1 mL of Coagulation Reference

## Characteristics

A linear relationship exists between the logarithm of the clotting time and the logarithm of the concentration of fibrinogen. The kit reference 4-5138005 is composed of 5 vials of 2 mL of reagent and a vial for calibration.

- Linearity from 0.6 to 7 g / L
- Stable 5 days in analyzers
- No interference for :

Heparin : UFH:  $\leq 2$  IU / mL  $\rightarrow$  CBrN  
 Fibrinogen fragment  $\leq 500$ mg / dL  
 Bilirubin :  $\leq 0.4$  mg / dL



## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

Chronometric assay



## Fibrinogen Reagent



## Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

TECHNOCLOT® Control A

TECHNOCLOT® Control N

Reference	Presentation	Format	Number of tests
4-5138080	Kit	5 x 5.0 mL	250
4-5138085	Kit	5 x 2.0 mL	100

**Fibrinogen assay based on the (modified) Clauss method.**



## Informations

Fibrinogen (Factor I) is a plasma soluble glycoprotein that is synthesized by the liver at a size of 340 kDa and circulating at a concentration of 2.6 to 3 mg/mL.

Fibrinogen is a dimer bound by disulfide bridges composed of 3 pairs of polypeptide chains not identical. Under the action of thrombin, fibrinogen is converted into fibrin. In combination with FXIII, calcium ions, fibrin forms a stable network that ensures coagulation.

## Components

- 5 vials x 2 mL or 5 mL of lyophilized reagent

## Characteristics

- Linearity from 0.6 to 7 g / L  
- Stable 5 days in analyzers

- No interference for :  
Heparin : UFH : CBrN  
Fibrinogen fragment Triglyceride : ≤ 500mg / dL  
Bilirubin: ≤ 0.4mg / dL



## SCREENING TESTS

## PT APTT FIBRINOGEN TT

CHRONOMETRIC DOSAGE SETS

## Pefakit® Reptilase® Time



## Associated products

Fibrinogen Reagent

Fibrinogen Reagent Kit

## Informations

The reptilase time is an easy and automatable chronometric test describing the transformation of fibrinogen into fibrin (fibrinof ormation), measured by the clotting time of a citrated blood plasma during the addition of venom (atrox Bothrops). Reptilase converts fibrinogen into fibrin. However, unlike thrombin, reptilase is insensitive to heparin.

Reference	Presentation	Format
8-800191	Kit	3 x 1.0 mL

**Pefakit® Reptilase® Time is used for the investigation of the last phase of blood coagulation.**

**Due to its heparin insensitivity, Pefakit® Reptilase® Time can detect fibrinogen polymerization disorders even in the presence of heparin.**

## Components

- 3 vials x 1 mL Reptilase Time Reagent

## Advantages

Inserts and certificates of analysis provided. Safety data sheets (SDS) provided. CE marking. Adaptable, the reagent is designed for use on most hemostasis analyzers.

## Characteristics

The Reptilase® Time reagent contains 20 BU (batroxobin units) and stabilizers.





# FROZEN CALIBRATORS AND CONTROLS

## SPECIALTY CALIBRATORS

MULTIPARAMETRIC CALIBRATORS

Fresh frozen plasmas



## CRYOcheck™ Normal Reference Plasma



### Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 1 Reference Control



CRYOcheck™ Abnormal 2 Reference Control

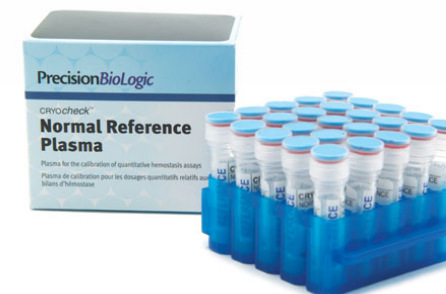
CRYOcheck™ Heparin Control

CRYOcheck™ Low Fibrinogen Control

Reference	Presentation	Format
CCNRP-05	Kit	25 x 0.5 mL
CCNRP-10	Kit	25 x 1.0 mL

### Calibration plasma for specialized quantitative assays for hemostatic parameters.

CRYOcheck™ Normal Reference Plasma is citrated human normal plasma. This specialized calibrator is obtained by mixing at least 20 bags of plasma from healthy donors. Titrated for the following parameters: Fibrinogen, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII, Prekallikrein, VWF : Antigen, VWF : Ristocetin Cof., Plasmin inhibitor, PS activity, Free PS and total Ag, AT activity and AT Ag, PC activity and PC Ag, Plasminogen.



### Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

### Advantages

- Citrate 3.2% equivalent
- Ready to use in minutes after thawing
- Compact, color-coded boxes for easier identification in freezers
- ISTH / SSC international standard
- Certificate of analysis supplied with each batch
- Turbidimetric method and aggregation for the ristocetin cofactor

Each parameter of the CRYOcheck™ Normal Reference Plasma is representative of the normal population and has been validated using a WHO international standard.

Reference values are assigned by independent and internationally recognized laboratories using international reference standards (for existing ones) using different hemostasis analyzers.

### Characteristics

- Collection by plasmapheresis
- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## WEAK CONTROLS

WEAK CONTROLS

Fresh frozen plasmas



## Very Low XI Control Plasma



### Informations

Factor XI (FXI) is a glycoprotein synthesized by the liver, zymogen of a serine protease. Its plasma half-life is 40 to 80 hours. This factor participates in the contact phase which initiates the intrinsic pathway of coagulation. It is activated by FXIIa to FXIa which will itself activate FIX in the presence of calcium ions.

Reference	Presentation	Format
6-VL11C-05	Kit	25 x 0.5 mL

**Control plasma to measure the accuracy of the quantitative determination of Factor XI in hemostasis for a very low value.**

This low value control is titrated for Factor XI hemostasis values around 2%.

### Components

- 25 cryotubes x 0.5 mL of frozen plasma

### Characteristics

- Undiluted citrated human plasma
- Ready to use after 3 min at 37°C
- Plasma from donors with congenital deficiency.
- Certificate of analysis mentioning the value of the measured parameter on request



# FROZEN CALIBRATORS AND CONTROLS

## WEAK CONTROLS

WEAK CONTROLS

Fresh frozen plasmas



## Very Low XII Control Plasma



### Informations

Factor XII is a glycoprotein synthesized by the liver, zymogen of a serine protease. Its plasma half-life is 50 to 70 hours. This factor participates in the contact phase which initiates the intrinsic pathway of coagulation.

Activated on contact with a negatively charged surface, it becomes capable of activating prekallikrein to kallikrein, then FXI to FXIa in the presence of KHPM.

It is also able to activate plasminogen into plasmin.

Reference	Presentation	Format
6-VL12C-05	Kit	25 x 0.5 mL

**Control plasma to measure the accuracy of the quantitative determination of Factor XII in hemostasis for a very low value.**

This low value control is titrated for Factor XII hemostasis values around 2%.

### Components

- 25 cryotubes x 0.5 mL of frozen plasma

### Characteristics

- Undiluted citrated human plasma
- Ready to use after 3 min at 37°C
- Plasma from donors with congenital deficiency.
- Certificate of analysis mentioning the value of the measured parameter on request



# FROZEN CALIBRATORS AND CONTROLS

## WEAK CONTROLS

WEAK CONTROLS

Fresh frozen plasmas



## Very Low VIII Control Plasma



### Associated products

CRYOcheck™ Chromogenic Factor VIII

Rox Factor VIII

TECHNOCHROM® FVIII:C

### Informations

Factor VIII is a glycoprotein almost entirely synthesized by the liver and present in many tissues.

Its plasma half-life is thus 10 to 16 hours.

The free form of FVIII is present at very low concentration and has a half-life of 2 hours.

It circulates in the plasma in its form bound to VWF which protects it from its proteolytic degradation.

Reference	Presentation	Format
6-VL8C-05	Kit	25 x 0.5 mL

**Control plasma to measure the accuracy of the quantitative determination of Factor VIII in hemostasis for a very low value.**

From an adult donor with congenital Factor VIII deficiency.

This low value control is titrated for the hemostasis values of FVIII around 2%.

### Components

- 25 cryotubes x 0.5 mL of frozen plasma

### Characteristics

- Undiluted citrated human plasma
- Ready to use after 3 min at 37 °C
- Plasma from donors with congenital deficiency.
- Certificate of analysis mentioning the value of the measured parameter on request



# FROZEN CALIBRATORS AND CONTROLS

## WEAK CONTROLS

WEAK CONTROLS

Fresh frozen plasmas



## Very Low IX Control Plasma



### Associated products

Rox Factor IX

### Informations

Factor IX is a glycoprotein synthesized by the liver, zymogen of a serine protease.

It is a vitamin K dependent factor and its plasma half-life is 20-24 hours.

It can be activated to FIXa by FXIa or FVIIa in the presence of phospholipids and calcium.

Reference	Presentation	Format
6-VL9C-05	Kit	25 x 0.5 mL

**Human plasma pool from donors with congenital factor IX deficiency.  
Control plasma to measure the accuracy of the quantitative determination of Factor IX in hemostasis for a very low value.**

This low value control is titrated for Factor IX hemostasis values around 2%.

### Components

- 25 cryotubes x 0.5 mL of frozen plasma

### Characteristics

- Undiluted citrated human plasma.
- Ready to use.
- Plasma from donors with congenital deficiency.
- Certificate of analysis mentioning the value of the measured parameter on request.



# FROZEN CALIBRATORS AND CONTROLS

## SPECIALTY CONTROLS

MULTIPARAMETRIC CONTROLS

Fresh frozen plasmas



# CRYOcheck™ Abnormal 1 Reference Control



### Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 2 Reference Control



CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
ARP1-05	Kit	25 x 0.5 mL
ARP1-10	Kit	25 x 1.0 mL

**Ready-to-use pathology control plasma to measure the accuracy of quantitative hemostasis assays.**

This specialized quality control is titrated for values at the limit of the pathological zone around 40%. Titrated for the following parameters: Fibrinogen, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII, Prekallikrein, VWF : Ag, VWF : Ristocetin Cof., Plasmin inhibitor, PS activity, Free PS and total Ag, AT activity and AT Ag, PC activity and PC Ag, Plasminogen.



### Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

### Advantages

- Citrate 3.2% equivalent
- Ready to use in minutes after thawing
- Compact, color-coded boxes for easier identification in freezers
- ISTH / SSC international standard
- Certificate of analysis supplied with each batch for 24 parameters
- Turbidimetric method and aggregation for the ristocetin cofactor

Each parameter of the CRYOcheck™ Abnormal 1 Reference Control is titrated for values at the limit of the pathological zone around 40%. Reference values are assigned by independent and internationally recognized laboratories using international reference standards (for existing ones) using different hemostasis analyzers.

### Characteristics

- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 3 years from the date of manufacture with storage between -40°C and -80°C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## SPECIALTY CONTROLS

MULTIPARAMETRIC CONTROLS

Fresh frozen plasmas



# CRYOcheck™ Abnormal 2 Reference Control



### Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 1 Reference Control



CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
ARP2-10	Kit	25 x 1.0 mL

**Ready-to-use pathology control plasma to measure the accuracy of quantitative hemostasis assays.**

This specialized quality control is titrated for values in the pathological zone between 5 and 10%. Titrated for the following parameters : Fibrinogen, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII, VWF : Ag, Plasmin Inhibitor, PS activity, Free PS and total Ag, AT activity and AT Ag, PC activity and PC Ag, Plasminogen.



### Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

### Advantages

- Citrate 3.2% equivalent
- Ready to use in minutes after thawing
- Compact, color-coded boxes for easier identification in freezers
- ISTH / SSC international standard
- Certificate of analysis supplied with each batch for 22 parameters

Each parameter of the CRYOcheck™ Abnormal 2 Reference Control is titrated for values at the lower limit of the pathological zone around 5 to 10%. Reference values are assigned by independent and internationally recognized laboratories using international reference standards (for existing ones) using different hemostasis analyzers.

### Characteristics

- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 3 years from the date of manufacture with storage between -40°C and -80°C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## SPECIALTY CONTROLS

MULTIPARAMETRIC CONTROLS

Fresh frozen plasmas



## CRYOcheck™ Reference Control Normal



### Associated products



CRYOcheck™ Abnormal 1 Reference Control



CRYOcheck™ Abnormal 2 Reference Control



CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
RCN-05	Kit	25 x 0.5 mL
RCN-10	Kit	25 x 1.0 mL

**Ready-to-use normal control plasma for measuring the accuracy of quantitative hemostasis assays.**

This specialized quality control is titrated for normal values around 100%. Titrated for the following parameters: Fibrinogen, Factor II, Factor V, Factor VII, Factor VIII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII, Prekallikrein, VWF : Ag, VWF : Ristocetin Cof., Plasmin Inhibitor, PS activity, Free PS and total Ag, AT activity and AT Ag, PC activity and PC Ag, Plasminogen.



### Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

### Advantages

- Citrate 3.2% equivalent
- Ready to use in minutes after thawing
- Compact, color-coded cabinets for easier identification in freezers
- ISTH / SSC international standard
- Certificate of analysis supplied with each batch for 24 parameters
- Turbidimetric method and aggregation for the ristocetin cofactor

Each parameter of the CRYOcheck™ Reference Control Normal is titrated for normal values ~ 100%. Reference values are assigned by independent and internationally recognized laboratories using international reference standards (for existing ones) using different hemostasis analyzers.

### Characteristics

- Mix of at least 20 bags of plasma from carefully selected healthy donors
- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Ready to use after 4 min (1mL) or 3 min (0.5mL) at 37 °C
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 3 years from the date of manufacture with storage between -40°C and -80°C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets



# FROZEN CALIBRATORS AND CONTROLS

## AVK

### CONTROLS

Fresh frozen plasmas



## Coumadin Plasma



### Associated products

Coumadin Plasma Set

### Informations

Warfarin (Coumadin) is an antithrombotic agent from the group of anti-vitamin K (AVK).

In plasma, it is strongly bound to albumin (97%). Only the free fraction is active and metabolized. AVKs are involved in the hepatocyte in the vitamin K reduction mechanism.

Reduced vitamin K is the cofactor of a carboxylase which converts glutamic acid to gamma-carboxyglutamic acid which is necessary for the attachment of certain coagulation factors to phospholipid surfaces.

AVKs have an indirect anticoagulant effect by preventing the synthesis of the active forms of several coagulation factors (factors II, VII, IX, X).

When administered orally, VKA induce hypoprothrombinemia within 36 to 72 hours. After stopping the AVK, the anticoagulant action persists for 4 days, the speed of correction being a function of the hepatic synthesis capacities of vitamin K-dependent coagulation factors and the half-life of the AVK.

The times indicated may be prolonged, in particular in the elderly. The half-life of warfarin is in the range of 35 to 45 hours.

Reference	Presentation	Format
7-4000	Kit	5 x 1.0 mL

**AVK control plasma in hemostasis. Donor under Coumadin® treatment. Plasma collected by plasmapheresis at approved donor centers.**

The kit is composed of five identical control plasmas having the same INR. This plasma is obtained from donor under prolonged oral anticoagulant treatment (AVK Coumadin®).

### Components

- 5 vials x 1 mL of frozen plasma

### Advantages

This plasma is recommended as a control for the prothrombin (PT) level assay method requiring the use of plasma from patients under coumadin treatment.

The plasma is untreated, not depleted.

### Characteristics

- Several INR levels are possible between 2 and 7
- The choice of INR is determined when ordering
- 1 lot corresponds to a donor
- Defrost 4 min at 37 °C



# FROZEN CALIBRATORS AND CONTROLS

## AVK

### CONTROLS

## Coumadin Plasma Set

Fresh frozen plasmas



### Associated products

Coumadin Plasma

Reference	Presentation	Format
7-9400	Kit	5 x 1.0 mL

### Set of AVK control plasmas in hemostasis.

The kit consists of a set of five different control plasmas, obtained from subjects on prolonged oral anticoagulant therapy (AVK Coumadin).

### Informations

Warfarin (Coumadin) is an antithrombotic agent from the group of anti-vitamin K (AVK).

In plasma, it is strongly bound to albumin (97%). Only the free fraction is active and metabolized. AVKs are involved in the hepatocyte in the vitamin K reduction mechanism.

Reduced vitamin K is the cofactor of a carboxylase which converts glutamic acid to gamma-carboxyglutamic acid which is necessary for the attachment of certain coagulation factors to phospholipid surfaces.

AVKs have an indirect anticoagulant effect by preventing the synthesis of the active forms of several coagulation factors (factors II, VII, IX, X).

When administered orally, VKA induce hypoprothrombinemia within 36 to 72 hours. After stopping the AVK, the anticoagulant action persists for 4 days, the speed of correction being a function of the hepatic synthesis capacities of vitamin K-dependent coagulation factors and the half-life of the AVK.

The times indicated may be prolonged, in particular in the elderly. The half-life of warfarin is in the range of 35 to 45 hours.

### Components

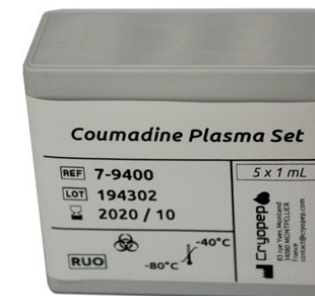
- 5 vials x 1 mL of frozen plasma

### Advantage

This plasma is recommended as a control for the prothrombin (PT) level assay method requiring the use of plasma from patients on coumadin treatment.

### Characteristics

- The INRs (International Normalized Ratio) are determined with recombinant thromboplastins.
- INR rates vary between 2 and 7.
- The plasmas are untreated, not depleted.
- Defrost 4 min at 37 °C



# FROZEN CALIBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

MULTIPARAMETRIC CONTROLS

Fresh frozen plasmas



# CRYOcheck™ Abnormal 1 Control



### Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 2 Reference Control



CRYOcheck™ Heparin Control

CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
CCA1-10	Kit	80 x 1.0 mL

### Level 1 pathological control plasma.

This routine quality control is titrated for routine hemostasis tests (QT, PT, aPTT, Fibrinogen).



### Components

- 80 cryotubes x 1 mL of frozen plasma

### Advantages

- CRYOcheck™ Abnormal 1 Control and CRYOcheck™ Abnormal 2 Control are treated to contain a reduced level of coagulant factors II, VII, IX and X in order to be under the same conditions as plasmas from patients treated with VKA.
- These controls are primarily used to monitor routine testing for laboratory quality assurance programs.
- Ready to use after 4 min at 37 °C.
- Compact, color-coded boxes for easier identification in freezers.

### Characteristics

- $1.5 \leq \text{INR} \leq 2$  TCA  $\approx 50$  s
- 24 hour stability after thawing
- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error
- The exact values are given with the certificate of analysis.
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

MULTIPARAMETRIC CONTROLS

Fresh frozen plasmas



# CRYOcheck™ Abnormal 2 Control



### Associated products



CRYOcheck™ Reference Control Normal



CRYOcheck™ Abnormal 1 Reference Control



CRYOcheck™ Heparin Control

CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
CCA2-10	Kit	80 x 1.0 mL

### Level 2 pathological control plasma.

This routine quality control is titrated for routine hemostasis tests (QT, PT, aPTT, fibrinogen).



### Components

- 80 cryotubes x 1 mL of frozen plasma

### Advantages

- CRYOcheck™ Abnormal 1 Control and CRYOcheck™ Abnormal 2 Control are treated to contain a reduced level of coagulant factors II, VII, IX and X in order to be under the same conditions as plasmas from patients treated with VKA.
- These controls are primarily used to monitor routine testing for laboratory quality assurance programs.
- Ready to use after 4 min at 37 °C
- Compact, color-coded boxes for easier identification in freezers

### Characteristics

- $2 \leq \text{INR} \leq 3$  TCA  $\approx 80$  s
- 24 hour stability after thawing
- The exact values are given with the certificate of analysis.
- Flash freezing under nitrogen
- No bovine additives No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

ANTICOAGULANT CONTROLS

Fresh frozen plasmas



# CRYOcheck™ Heparin Control



### Associated products

CRYOcheck™ Abnormal 1 Control

CRYOcheck™ Abnormal 2 Control

CRYOcheck™ Low Fibrinogen Control

CRYOcheck™ Normal Reference Plasma

CRYOcheck™ Pooled Normal Plasma

### Informations

Heparin is widely used in hospitals as an anticoagulant.

Unfractionated heparin is usually monitored using APTT and thrombin time tests.

Often, plasma samples are not identified as containing heparin and may be present as an unexpected contaminant.

Reference	Presentation	Format
CCH-10	Kit	80 x 1.0 mL

### Pathological plasma for the assay of activated partial thromboplastin time (TCA) and anti-factor Xa.

CRYOcheck™ Heparin Control is a hemostatic quality control made from a plasma pool that has been overloaded with sodium unfractionated heparins to monitor the change in activated partial thromboplastin time (TCA) over time.



### Components

- 80 cryotubes x 1 mL of frozen plasma

### Advantages

- Ready to use after 4 min at 37 °C
- Compact, color-coded boxes for easier identification in freezers

### Characteristics

- TCA ≈ 80 s Anti-Xa activity ≈ 0.3 IU / mL
- Values may vary depending on technique, instrument and reagent used.
- Flash freezing under nitrogen
- No bovine additives
- No reconstitution error No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets

# FROZEN CALIBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

WEAK CONTROLS

Fresh frozen plasmas



## CRYOcheck™ Low Fibrinogen Control



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

### Informations

Fibrinogen is a soluble protein made by the liver. Under the action of thrombin, fibrinogen is converted into fibrin.

In association with FXIII, calcium ions, fibrin forms a stable network which ensures coagulation.

Reference	Presentation	Format
CCLF-10	Kit	80 x 1.0 mL

**Pathological control plasma for the quantitative determination of fibrinogen for a value around 0.9 g/L.**

CRYOcheck™ Low Fibrinogen Control is a routine hemostasis control derived from a pool of citrated plasmas and adjusted to express the characteristics of hypofibrinogenemia. It contains a small but known quantity of fibrinogen (around 0.9 g/L) determined by the Clauss method.

### Components

- 80 cryotubes x 1 mL of frozen plasma

### Advantages

- 72h stability after thawing
- The exact value is indicated on the certificate of analysis.
- Ready to use in minutes after thawing
- Compact, color-coded boxes for easier identification in freezers
- CE Marking

### Characteristics

- Flash freezing under nitrogen
- No bovine additives No reconstitution error
- No deterioration of plasmas linked to freeze-drying
- Plasmas verified negative for all tests required by the FDA
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type microgodets



# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CALIBRATORS

MULTIPARAMETRIC CALIBRATORS

## Coagulation Reference

Lyophilized plasmas



### Associated products



Coagulation Control A



Coagulation Control N

Reference	Presentation	Format
4-5220110	Vial	5 x 1.0 mL
4-5220120	Vial	50 x 1.0 mL

### Calibration plasma for quantitative assays specialized in hemostasis.

The specialized Coagulation Reference calibrator is obtained from citrated plasmas for all the parameters indicated in hemostasis. Titrated for the following parameters: PT / aPTT, Fibrinogen / Thrombin time, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII act. et FXIII Ag, Prekallikreine, Kininogen, VWF : Ag / VWF : CBA, VWF : Ristocetin Cof., C1-Inhibitor, AT activity, PC act. chrono. and chromo. / PC ag., Free PS Ag.

### Components

- 5 or 50 vials x 1 mL lyophilized plasma

### Advantages

- To draw a reference curve with global tests
- To establish a reference curve for all coagulation factors and inhibitors listed in the table provided in each kit. (depending on the lots).
- As a quantitative precision control for all parameters indicated

### Characteristics

The activity of clotting factors is normally distributed for each donor. As a result, the "average" presence of all coagulation factors and inhibitors is guaranteed. Coagulation Reference contains a stabilizer but no bactericidal additive.



# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CALIBRATORS

CALIBRATORS

### Factor XIa Calibrator

Colorimetric assay



#### Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic pathway of coagulation. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

Reference	Presentation	Format
5-1199	Vial	10 x 4.0 mL

**Purified preparation of factor XIa for the ROX FXIa kit, calibrated against the WHO international standard.**

Calibration plasma for the determination of FXIa in hemostasis.



#### Components

- 10 vials x 4 mL lyophilized plasma

#### Method / Application

The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa.

The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm and is proportional to the concentration of FIXa in the reaction medium.

#### Characteristics

The activity is determined from a calibration with the 1st international standard for human FXIa a NIBSC 13/100 used in the ROX Factor XIa kit. The ROX FACTOR XIa is a quantitative enzymatic and chromogenic assay kit for the determination of FXI activity in concentrates of human FXI.



# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CALIBRATORS

CALIBRATORS

### Factor IXa Calibrator

Colorimetric assay



#### Associated products

Rox FIX-A

Factor IXa Control

#### Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver. FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Format
5-9599	Vial	10 x 2.0 mL

**Purified preparation of Factor IXa for the ROX FIX-A kit, calibrated against the international standard WHO.**

Calibration plasma for the determination of FIXa in colorimetry, it can be used directly without dilution after reconstitution.

#### Components

- 10 vials x 2 mL lyophilized plasma

#### Method / Application

The ROX FIX-A is a chromogenic enzymatic assay kit for the determination of very low amounts of FIXa in human FX concentrates. The results are expressed in IU. The sensitivity of the assay is 0.1 mIU / mL. This method is based on the activation of FX by FIXa (considered a contaminant in FX concentrate) in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.



# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CALIBRATORS

CALIBRATORS

### EMICIZUMAB Calibrator

Colorimetric assay



#### Associated products

EMICIZUMAB Controls

#### Informations

Emicizumab, a drug intended for the prophylactic treatment of patients with hemophilia A, is a bispecific antibody that bridges activated Factor IX (FIXa) and Factor X (FX), there by restoring FVIII function, necessary for normal hemostasis.

The Emicizumab Calibrator can be used to determine the active amount of Emicizumab by measuring FVIII activity in a one-step chromometric assay with a hemostasis analyzer in citrated human plasma.

Reference	Presentation	Format
6-151-201	Vial	5 x 1 mL

#### Calibration Plasma for EMICIZUMAB.

The Emicizumab Calibrator is a plasma designed for the calibration of Factor VIII (FVIII) when determining activity by the one-step chromometric methods.

#### Components

- 5 vials of 1 mL, lyophilized (citrated plasma immunodepleted in FVIII with 100µg / mL Emicizumab)

#### Characteristics

The calibrator is used to determine the amount of active Emicizumab in the plasma based on the measurement of the activated partial thromboplastin time.

After dilution of the calibrator, plasma deficient in FVIII is added as well as TCA reagent. Coagulation is initiated by adding CaCl<sub>2</sub>. The degree of TCA correction is correlated with the activity of Emicizumab, the concentration of which in µg / mL is determined using a calibration curve.



# LYOPHILIZED CALBRATORS AND CONTROLS

## SPECIALTY CONTROLS

MULTIPARAMETRIC CONTROLS

## Coagulation Control N

Lyophilized plasmas



### Associated products



Coagulation Control A



Coagulation Reference

Reference	Presentation	Format
4-5020040	Vial	5 x 1.0 mL
4-5020050	Vial	50 x 1.0 mL

### Control plasma for specialized quantitative assays for normal activity.

The Coagulation Control N control is normal for all the specialized parameters indicated in hemostasis.

Titred for the following parameters: PT / aPTT, Fibrinogen / Thrombin Time, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII act. and FXIII Ag, Prekallikrein, Kininogen, VWF : Ag / VWF : CBA, VWF : Ristocétin Coef, C1-Inhibitor, AT activity, PC act.chrono. and chromo. / PC Ag, Free PS Ag.

### Components

- 5 or 50 vials x 1 mL lyophilized plasma

### Characteristics

Coagulation Control N was prepared from donations of citrated plasmas from healthy donors.

The clotting activity is normally distributed. It is intended for the control of screening tests (PT, aPTT, TT, fibrinogen) as well as to determine the various individual factors for normal activity.



# LYOPHILIZED CALBRATORS AND CONTROLS

## SPECIALTY CONTROLS

MULTIPARAMETRIC CONTROLS

## Coagulation Control A

Lyophilized plasmas



### Associated products



Coagulation Control N



Coagulation Reference

Reference	Presentation	Format
4-5021055	Vial	5 x 1.0 mL
4-5021060	Vial	50 x 1.0 mL

### Control plasma for specialized quantitative assays for abnormal activity.

The Coagulation Control A control is abnormal for all the specialized parameters indicated in hemostasis. Titrated for the following parameters: PT / aPTT, Fibrinogen / Thrombin Time, Factor II, Factor V, Factor VII, Factor VIII (Chromogenic and Clotting), Factor IX, Factor X, Factor XI, Factor XII, Factor XIII act. and FXIII Ag, Prekallikrein, Kininogen, VWF : Ag / VWF : CBA, VWF : Ristocétin Coef, C1-Inhibitor, AT activity, PC act.chrono. and chromo., PC Ag, Free PS Ag.

### Components

- 5 or 50 vials x 1 mL lyophilized plasma

### Characteristics

Coagulation control A is an abnormal citrated human plasma in which the level of coagulation factors is reduced. It is intended for the control of screening tests (PT, aPTT, TT, fibrinogen) as well as for determining the various individual factors and inhibitors in a range between normal and abnormal activity.



# LYOPHILIZED CALBRATORS AND CONTROLS

## SPECIALTY CONTROLS

CONTROLS

### Factor XIa Control

Colorimetric assay



#### Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic coagulation pathway. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

Reference	Presentation	Format
5-1188	Vial	10 x 4.0 mL

**Purified preparation of Factor XIa for the ROX FXIa kit, titrated against the WHO international standard.**

Quality control plasma for the determination of FXIa in hemostasis.



#### Components

- 10 vials of 4 mL of freeze-dried plasma

#### Method / Application

The FIXa formed activates FX to FXa in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by the hydrolysis of a chromogenic substrate of FXa.

The amount of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.

#### Characteristics

Calibration of the human FXIa lyophilisate was carried out using the international standard NIBSC 11/236 used in the ROX Factor XIa kit. The ROX FACTOR XIa is a quantitative enzymatic and chromogenic assay kit for the determination of FXI activity in concentrates of human FXI.

# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CONTROLS

CONTROLS

### Factor IXa Control

Colorimetric assay



#### Associated products

Rox FIX-A

Factor IXa Calibrator

#### Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver.

FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Format
5-9588	Vial	10 x 2.0 mL

**Purified preparation of Factor IXa for the ROX FIX-A kit, titrated against the international standard WHO.**

Quality control plasma for the determination of FIXa in colorimetry.

#### Components

- 10 vials x 2 mL lyophilized plasma

#### Method / Application

The ROX FIX-A is a chromogenic enzymatic assay kit for the determination of very small amounts of FIXa in human FIX concentrates. The results are expressed in IU. The sensitivity of the assay is 0.1 mIU / mL. This method is based on the activation of FX by FIXa (considered a contaminant in FIX concentrate) in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.



# LYOPHILIZED CALIBRATORS AND CONTROLS

## SPECIALTY CONTROLS

CONTROLS

## EMICIZUMAB Controls

Colorimetric assay



### Associated products

EMICIZUMAB Calibrator

Reference	Presentation	Format
6-152-401	Vial	2 x 5 x 1 mL

### Control plasma levels 1 & 2 for EMICIZUMAB

Emicizumab controls are level 1 & 2 controls intended to validate the calibration curve of FVIII activity by Emicizumab determined by an activated partial thromboplastin time.

### Informations

Emicizumab, a drug intended for the prophylactic treatment of patients with hemophilia A, is a bispecific antibody that bridges activated Factor IX (FIXa) and Factor X (FX), thereby restoring FVIII function. missing, necessary for normal hemostasis.

### Components

- Level 1: 5 vials x 1.0 mL
- Level 2: 5 vials x 1.0 mL

### Characteristics

Emicizumab levels 1 and 2 controls are used in the same way as plasmas from citrated patients. Emicizumab controls are prepared from citrated plasma immunodepleted in FVIII to which Emicizumab has been added to obtain a final concentration of 25 µg / mL (level 1) and 75 µg / mL (level 2).



# LYOPHILIZED CALIBRATORS AND CONTROLS

## AVK

### CALIBRATORS

## AK-Calibrant

Lyophilized plasmas



### Associated products

DAPTIN® TC

Siron LIS (aPTT liquid)

Siron LS (aPTT liquid)

TECHNOPLASTIN® HIS

### Informations

PIVKA (Protein Induced by Vitamin K Absence) are abnormal non-functional coagulation factors due to the absence of vitamin K.

TP : The prothrombin level

TCA : Activated Partial Thromboplastin Time (aPTT)

Reference	Presentation	Format
4-5010004	Kit	4 x 1.0 mL

**Direct determination of the INR (International Normalized Ratio). Determination of the ISI (International sensitivity index) and the prothrombin time (PT) of the patient.**

The AK-Calibrator contains four different plasmas from patients on anti-vitamin K treatment (AVK) for standardization of prothrombin time in hemostasis.

### Components

- AK-Calibrant A 1 vial x 1mL, lyophilized
- AK-Calibrant B 1 vial x 1mL, lyophilized
- AK-Calibrant C 1 vial x 1mL, lyophilized
- AK-Calibrant D 1 bottle x 1mL, lyophilized

Calibrator A is obtained from a pool of normal plasmas. Calibrators B, C and D are obtained from subjects under prolonged oral anticoagulant treatment.

### Characteristics

Determination of the reference curve in%.

The exact values of TP, INR and TCA are given for the main thromboplastin reagents on the market (Stago, IL and Siemens).

- Calibrator A is lyophilized AVK normal plasma with an INR  $\approx$  1.0
- Calibrator B is lyophilized AVK plasma with an INR  $\approx$  2.0
- Calibrator C is lyophilized AVK plasma with an INR  $\approx$  3.0
- Calibrator D is lyophilized AVK plasma with an INR  $\approx$  4.0





# LYOPHILIZED CALIBRATORS AND CONTROLS

## AVK

CONTROLS

## AK Verification Kit



### Associated products

TECHNOCLOT® PT Owren Automated

TECHNOCLOT® PT Owren Manual

AK-Calibrant

### Informations

Warfarin (Coumadin) is an antithrombotic agent from the group of anti-vitamin K (AVK). In plasma, it is strongly bound to albumin (97%). Only the free fraction is active and metabolized. AVKs are involved in the hepatocyte in the vitamin K reduction mechanism.

Reduced vitamin K is the cofactor of a carboxylase which converts glutamic acid to gamma-carboxyglutamic acid which is necessary for the attachment of certain coagulation factors to phospholipid surfaces.

AVKs have an indirect anticoagulant effect by preventing the synthesis of the active forms of several coagulation factors (factors II, VII, IX, X). When administered orally, VKA induce hypoprothrombinemia within 36 to 72 hours.

After stopping the AVK, the anticoagulant action persists for 4 days, the speed of correction being a function of the hepatic synthesis capacities of vitamin K-dependent coagulation factors and the half-life of the AVK.

The times indicated may be prolonged, in particular in the elderly. The half-life of warfarin is in the range of 35 to 45 hours.

Reference	Presentation	Format
4-5010024	Kit	3 x 1,0 mL

### AVK control plasma in hemostasis.

The AK-Verification Kit contains three plasma levels (1,2, and 3) which are produced exclusively from the plasma of donors on long-term oral anticoagulant treatment.

### Components

- 1 vial of 1 mL of patient plasma on lyophilized anticoagulants -> INR ≈ 2.0
- 1 vial of 1 mL of patient plasma on lyophilized anticoagulants -> INR ≈ 3.0
- 1 vial of 1 mL of patient plasma on lyophilized anticoagulants -> INR ≈ 4.0

### Characteristics

The AK Verification Kit contains three plasma levels (1, 2 and 3) which are produced exclusively from the plasma of donors on long-term oral anticoagulant therapy.

Inhibitors of PIVKA (Proteins Induced by the Absence of Vitamin K) are present as in the patient's plasma.

No preservatives are added to freeze-dried plasmas.



# LYOPHILIZED CALIBRATORS AND CONTROLS

## AVK

CONTROLS

### Coagulation Control AK

Lyophilized plasmas



#### Associated products

DAPTTIN® TC  
Siron LIS (aPTT liquid)  
Siron LS (aPTT liquid)  
TECHNOPLASTIN® HIS

Reference	Presentation	Format
4-5011050	Vial	5 x 1.0 mL
4-5011060	Vial	50 x 1.0 mL

#### AVK control plasma.

AK Coagulation Control contains plasma obtained from subjects on prolonged oral anti-vitamin K (AVK) anticoagulant therapy.

#### Informations

PIVKA (Protein Induced by Vitamin K Absence) are abnormal non-functional coagulation factors due to the absence of vitamin K.

INR: International Normalized Ratio

TP: The prothrombin level

TCA: Activated Partial Thromboplastin Time (aPTT)

#### Components

- 5 or 50 vials x 1 mL lyophilized plasma

#### Advantages

- Undiluted, untreated and undepleted plasma
- Contains PIVKA
- Donor plasmas under AVK treatment

#### Characteristics

The exact values of TP, INR and TCA are given for the main thromboplastin reagents on the market (Stago, IL and Siemens).

$2.5 \leq \text{INR} \leq 3.5$



# LYOPHILIZED CALBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

MULTIPARAMETRIC CONTROLS

Lyophilized plasmas



### TECHNOCLOT® Control N



#### Associated products

DAPTIN® TC  
Fibrinogen Reagent  
Siron LIS (aPTT liquid)  
TECHNOPLASTIN® HIS

Reference	Presentation	Format
4-5020070	Vial	10 x 1.0 mL
4-5020075	Vial	50 x 1.0 mL

#### Control plasma for normal activity.

This quality control is titrated for routine hemostasis tests : PT, aPTT, Thrombin Time and fibrinogen for normal values.

#### Informations

PT : Prothrombin level  
aPTT : Activated partial thromboplastin time  
TT : Thrombin time

#### Components

- 10 or 50 vials x 1 mL lyophilized plasma

#### Characteristics

TECHNOCLOT® Control N was prepared from donations of citrated plasmas from healthy donors.  
The clotting activity is normally distributed for each donor.  
Therefore, the "average" presence of all coagulation factors and inhibitors is guaranteed.  
TECHNOCLOT® Control A contains stabilizers but no bactericidal adjuvants.



# LYOPHILIZED CALBRATORS AND CONTROLS

## SCREENING TEST CONTROLS

MULTIPARAMETRIC CONTROLS

### TECHNOCLOT® Control A

Lyophilized plasmas



#### Associated products

DAPTTIN® TC  
Fibrinogen Reagent  
Siron LIS (aPTT liquid)  
Siron LS (aPTT liquid)  
TECHNOPLASTIN® HIS

Reference	Presentation	Format
4-5021070	Vial	10 x 1.0 mL
4-5021075	Vial	50 x 1.0 mL

#### Control plasma between normal and abnormal activity in hemostasis.

This quality control is titrated for routine hemostasis tests (PT, aPTT, TT and fibrinogen) for abnormal values.



#### Informations

PT : Prothrombin level  
aPTT : Activated partial thromboplastin time  
TT : Thrombin time

#### Components

- 10 or 50 vials x 1 mL lyophilized plasma

#### Characteristics

TECHNOCLOT® Control A is an abnormal citrated human plasma in which the level of coagulation factors is reduced.  
TECHNOCLOT® Control A contains stabilizers but no bactericidal adjuvants.



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR II

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor II Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Clot C™

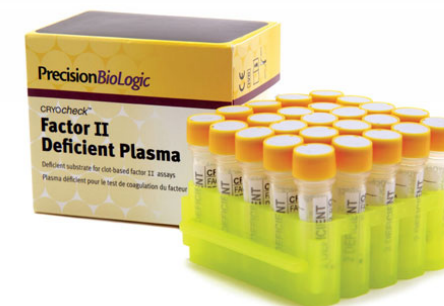
CRYOcheck™ Clot S™

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format	Number of tests
FDP02-10	Kit	25 x 1.0 mL	500
FDP02-15	Kit	25 x 1.5 mL	750

### Plasma deficient for Factor II assay.

CRYOcheck™Factor II Deficient is a frozen plasma, immuno-depleted, poor in platelets and certified to have less than 1% FII. It is deficient in both antigenic and functional assay.



### Informations

Factor II or prothrombin, is the precursor protein of thrombin, a key enzyme in coagulation.

Prothrombin is synthesized by the liver and is vitamin K dependent.

FII is activated to thrombin by the prothrombinase complex. Its half-life is 50 to 120 hours.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma

### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C.



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR V

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor V Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

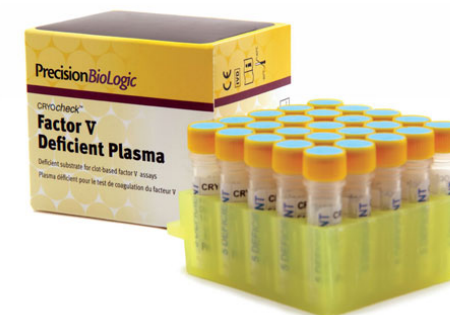
CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format	Number of tests
FDP05-10	Kit	25 x 1.0 mL	500
FDP05-15	Kit	25 x 1.5 mL	750

### Plasma deficient for the determination of Factor V.

CRYOcheck™ Factor V Deficient is frozen, immuno-depleted, platelet poor plasma certified to have less than 1% FV. It is deficient both for antigenic assay and functional in hemostasis.



### Informations

Factor V (FV) is a protein mainly synthesized by the liver. It is the enzymatic cofactor of FX and is activated in FVa by thrombin and / or FXa. With FXa, it forms a complex which, in the presence of phospholipids and calcium, activates FII into thrombin.

The FVa is neutralized by the PCa. Its plasma half-life is 12 to 36 hours.

### Components

- 25 cryotubes de 1 mL ou 1,5 mL de plasma congelé

### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C.



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR VII

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor VII Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format	Number of tests
FDP07-10	Kit	25 x 1.0 mL	500
FDP07-15	Kit	25 x 1.5 mL	750

### Plasma deficient for Factor VII assay.

CRYOcheck™ Factor VII Deficient is a frozen plasma, immuno-depleted, poor in platelets and certified to have less than 1% Factor VII.

It is deficient both for antigenic assay and functional in hemostasis.



### Informations

Factor VII (FVII) is a glycoprotein synthesized by the liver, vitamin k dependent. When tissue factor (TF) appears on the surface of damaged, abnormal or activated vascular endothelium, FVIIa associates with it, initiating the extrinsic pathway of coagulation.

The FT-FVIIa complex activates the FX in FXa and the FIX in FIXa.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma

### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR X

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor X Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format	Number of tests
FDP10-10	Kit	25 x 1.0 mL	500
FDP10-15	Kit	25 x 1.5 mL	750

### Plasma deficient for factor X assay.

CRYOcheck™ Factor X Deficient is a frozen plasma, immuno-depleted, poor in platelets and certified to have less than 1% factor X. It is deficient in both antigenic assay and functional in hemostasis.

### Informations

Factor X (FX) is a glycoprotein synthesized by the liver, dependent on vitamin K. FX is involved in the common pathway of coagulation.

It is activated in FXa by the FT-FVIIIa complex or by the FVIIIa-FIXa complex in the presence of phospholipids.

FXa is neutralized by TFPI and antithrombin.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma



### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Precise rates indicated in the certificate of analysis for all factors
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoabsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C.





# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR VIII

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor VIII Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal  
 CRYOcheck™ Abnormal 1 Reference Control  
 CRYOcheck™ Abnormal 2 Reference Control  
 CRYOcheck™ Factor IX Deficient Plasma  
 CRYOcheck™ Factor XI Deficient Plasma  
 CRYOcheck™ Factor XII Deficient Plasma  
 CRYOcheck™ Normal Reference Plasma  
 CRYOcheck™ Prekallikrein Deficient Plasma  
 Fitzgerald Trait Plasma  
 Very Low VIII Control Plasma

### Informations

Factor VIII is a glycoprotein mainly synthesized by the liver. It circulates in the plasma in the form bound to VWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa. A patient who is deficient in FVIII has hemophilia A.

Reference	Presentation	Format	Number of tests
FDP08-10	Kit	25 x 1.0 mL	500
FDP08-15	Kit	25 x 1.5 mL	750

### Plasma deficient for factor VIII assay.

CRYOcheck™ Factor VIII Deficient is a frozen plasma, immuno-depleted, poor in platelets and certified to have less than 1% factor VIII.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma

### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Precise rates indicated in the certificate of analysis for all factors
- Ready to use

### Characteristics

- CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.
- Certificate of analysis supplied with each batch.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Contains no inhibitor, suitable for research of inhibitors (Bethesda or Nijmegen)
- It is deficient both for antigenic assay and functional in hemostasis.



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR VIII avec VWF

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor VIII Deficient Plasma with VWF



## Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format
FDP08VWF-10	Kit	25 x 1.0 mL
FDP08VWF-15	Kit	25 x 1.5 mL

**Human plasma deficient in Factor VIII with a normal level of von Willebrand factor (VWF), used for the search for inhibitors of Factor VIII. Immunodepleted, frozen and poor in platelets.**

Factor VIII deficient plasma with a normal level of VWF for clinical laboratory use for the quantitative determination of Factor VIII (FVIII) activity in 3.2% citrated human plasma.

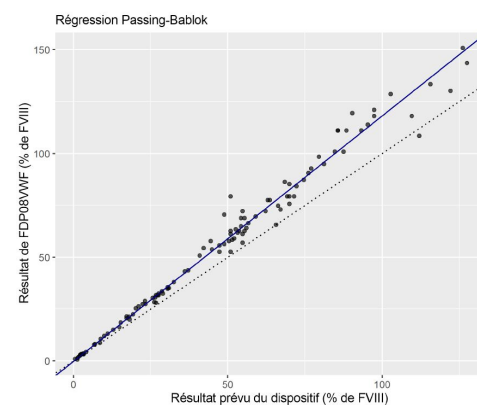
## Informations

Factor VIII is a glycoprotein with a molecular weight of 250,000 Da synthesized mainly by the liver. It circulates in the plasma in the form bound to VWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa. A patient who is deficient in FVIII has hemophilia A.

## Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma



## Advantages

- Ready to use after thawing, saves time.
- Convenient frozen format
- Ready to use quickly and without reconstitution errors.
- Protocol available on request.

The importance of VWF antigen levels in the performance of FVIII-deficient plasmas was demonstrated in a poster presented at ISTH 2021.

## Characteristics

CRYOcheck™ Factor VIII Deficient Plasma with VWF is an immunounfolded plasma of FVIII that contains normal concentrations of von Willebrand factor (VWF). FVIII has been validated as having less than 1% of the normal levels of antigen and activity, while the levels of antigen and activity of VWF are > 50%.

CRYOcheck™ Factor VIII Deficient Plasma with VWF aims to identify FVIII deficiency and support the management of hemophilia A in people aged 2 years and older.

Intended for in vitro diagnostic use.



# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR IX

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor IX Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

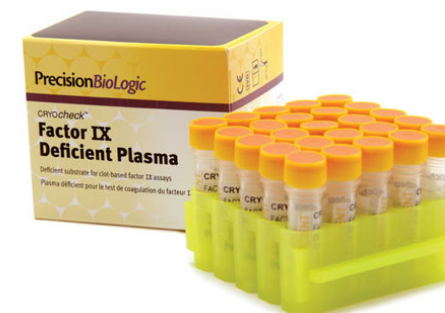
CRYOcheck™ Normal Reference Plasma

Very Low IX Control Plasma

Reference	Presentation	Format	Number of tests
FDP09-10	Kit	25 x 1.0 mL	500
FDP09-15	Kit	25 x 1.5 mL	750

### Plasma deficient for Factor IX assay.

CRYOcheck™ Factor IX Deficient is a frozen, immuno-depleted, platelet poor plasma certified to have less than 1% FIX.

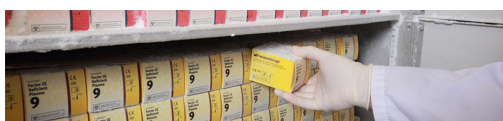


### Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver. FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium. A person who is deficient in FIX has hemophilia B.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma



### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C.
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Contains no inhibitor, suitable for research of inhibitors (Bethesda or Nijmegen)

# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR XI

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor XI Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Very Low XI Control Plasma

Reference	Presentation	Format	Number of tests
FDP11-10	Kit	25 x 1.0 mL	500
FDP11-15	Kit	25 x 1.5 mL	750

### Plasma deficient for Factor XI assay.

CRYOcheck™ Factor XI Deficient is a frozen, immuno-depleted, platelet poor plasma certified to have less than 1% FXI.



### Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic pathway of coagulation. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma



### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR XII

FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Factor XII Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Very Low XII Control Plasma

Reference	Presentation	Format	Number of tests
FDP12-10	Kit	25 x 1.0 mL	500
FDP12-15	Kit	25 x 1.5 mL	750

### Plasma deficient for Factor XII assay.

CRYOcheck™ Factor XII Deficient is a frozen plasma, immuno-depleted, poor in platelets and certified to have less than 1% Factor XII.



### Informations

Factor XII (FXII) is a glycoprotein synthesized in the evening. FXII participates in the contact phase which initiates the intrinsic pathway of coagulation. Activated on contact with a negatively charged surface, it becomes capable of activating prekallikrein and kallikrein (amplified by KHPM) then FXI to FXIa in the presence of KHPM. The FXIa thus formed activates the FXII in FXIIa, amplifying the reaction.

### Components

- 25 cryotubes x 1 mL or 1.5 mL of frozen plasma



### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma consist of pools of citrated human normal plasmas which have been depleted into a coagulation factor by immunoadsorption, buffered with HEPES buffer, aliquoted and frozen rapidly.

- Certificate of analysis supplied with each batch.
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

# FROZEN IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### PREKALLIKREIN

NATIVE DEFICIENT PLASMAS

Fresh frozen plasmas



# CRYOcheck™ Prekallikrein Deficient Plasma



### Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Reference	Presentation	Format	Number of tests
FDPK-10	Kit	10 x 1.0 mL	200

### Plasma deficient for the determination of prekallikrein.

CRYOcheck™ Prekallikrein Deficient is a congenital frozen plasma, low in platelets and certified to have less than 1% prekallikrein



### Informations

Prekallikrein is a glycoprotein, a serine protease zymogen. Non-covalently complexed with high molecular weight kininogen.

Prekallikrein participates in the activation of coagulation, fibrinolysis, the generation of kinins and inflammatory phenomena.

It is activated into kallikrein by FXIIa.

### Components

- 10 cryotubes x 1 mL



### Advantages

- CE adaptation on many analyzers on the market
- Technical validation file
- Reserved lots
- Ready to use

### Characteristics

CRYOcheck™ Factor Deficient Plasma are made from citrated human plasma pools with congenital prekallikrein deficiency, buffered with HEPES buffer, aliquoted and quickly frozen.

- Certificate of analysis supplied with each batch.
- The other factors have been tested and the results are provided on the Certificate of Analysis that accompanies each lot number.
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR II

IMMUNODEPLETED DEFICIENT PLASMAS

Lyophilized plasmas



## Factor II Deficient Plasma Immunodepleted



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

Factor II or prothrombin, is the precursor protein of thrombin, a key enzyme in coagulation. Prothrombin is synthesized by the liver and is dependent on vitamin K.

FII is activated to thrombin by the prothrombinase complex. Its half-life is 50 to 120 hours.

FII is activated to thrombin by the prothrombinase complex. Its half-life is 50 to 120 hours.

Reference	Presentation	Format	Number of tests
4-5114008	Vial	5 x 1.0 mL	100

### Plasma deficient for Factor II assay.

Factor II Deficient Plasma is lyophilized and immuno-depleted human plasma with coagulant activity <1% for Factor II.

### Components

- 5 vials x 1 mL lyophilized plasma

### Advantage

- Deficient plasma can be aliquoted and frozen for 1 month at -20 °C after reconstitution.

### Characteristics

- Deficient plasma of human origin, stabilized and lyophilized with an activity <1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Deficient plasma obtained by immunoabsorption.
- The plasma deficient in FII is used for the determination of FII by the one-step method based on the prothrombin time.



# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR V

IMMUNODEPLETED DEFICIENT PLASMAS

Lyophilized plasmas



# Factor V Deficient Plasma Immunodepleted



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

Factor V (FV) is a protein mainly synthesized by the liver. It is the enzymatic cofactor of FX and is activated in FVa by thrombin and / or FXa. It forms with FXa a complex which, in the presence of phospholipids and calcium, activates prothrombin to thrombin. The FVa is neutralized by the PCa.

Reference	Presentation	Format	Number of tests
4-5134004	Vial	5 x 1.0 mL	100

### Plasma deficient for Factor V assay.

Factor V Deficient Plasma is lyophilized and immuno-depleted human plasma with coagulant activity < 3% for FV.



### Components

- 5 vials x 1 mL lyophilized plasma

### Advantage

- Deficient plasma can be aliquoted and frozen for 1 month at -20 °C after reconstitution.

### Characteristics

- Deficient plasma of human origin, stabilized and lyophilized with an activity < 3% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Deficient plasma obtained by immunoabsorption.
- The FV-deficient plasma is used for the determination of FV by the one-step method using a specific thromboplastin. It can be used for the determination of resistance to PCa.



# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR VII

IMMUNODEPLETED DEFICIENT PLASMAS

Lyophilized plasmas



# Factor VII Deficient Plasma Immunodepleted



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

Factor VII (FVII) is a glycoprotein synthesized by the liver, zymogen of a serine protease. It is a vitamin K dependent factor belonging to the prothrombin complex. Its half-life is 4 to 6 hours and it is the only coagulation factor present in trace amounts in its active form.

When tissue factor appears on the endothelial surface, activated FVII associates with it initiating the extrinsic pathway for coagulation. This complex (FT-FVIIa) will activate the FX in FXa and the FIX in FIXa.

Reference	Presentation	Format	Number of tests
4-5144015	Vial	5 x 1.0 mL	100

### Plasma deficient for factor VII assay.

Factor VII Deficient Plasma is lyophilized and immuno-depleted human plasma with coagulant activity < 1% for FVII.



### Components

- 5 vials x 1 mL lyophilized plasma

### Advantage

Deficient plasma can be aliquoted and frozen for 1 month at -20 °C after reconstitution.

### Characteristics

- Deficient plasma of human origin, stabilized and lyophilized with an activity < 1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Deficient plasma obtained by immunoabsorption.
- Plasma, deficient in FVII, is used for the determination of FVII by the one-step method based on prothrombin time.

# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## EXTRINSIC PATHWAY

### FACTOR X

IMMUNODEPLETED DEFICIENT PLASMAS

Lyophilized plasmas



## Factor X Deficient Plasma Immunodepleted



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

Factor X (FX) is a glycoprotein synthesized by the liver, dependent on vitamin K. FX is involved in the common pathway of coagulation.

It is activated in FXa by the FT-FVIIa complex or by the FVIIIa-FIXa complex in the presence of phospholipids.

FXa is neutralized by TFPI and antithrombin.

Reference	Presentation	Format	Number of tests
4-5174006	Vial	5 x 1.0 mL	100

### Plasma deficient for Factor X assay.

Factor X Deficient Plasma is lyophilized and immuno-depleted human plasma with coagulant activity < 1% for FX.

### Components

- 5 vials x 1 mL lyophilized plasma

### Advantage

Deficient plasma can be aliquoted and frozen for 1 month at -20 °C after reconstitution.

### Characteristics

- Deficient plasma of human origin, stabilized and lyophilized with an activity < 1% of the corresponding coagulation factor. All other coagulation factors have normal values.
- Deficient plasma obtained by immunoabsorption.
- The FX-deficient plasma is used for the FX assay by the one-step method using thromboplastin.



# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR VIII

IMMUNODEPLETED DEFICIENT PLASMAS

Lyophilized plasmas



## Factor VIII Deficient Plasma, immunads.



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

DAPTIN® TC

Siron LS (aPTT liquid)

Solution CaCl<sub>2</sub> 25 mM

Reference	Presentation	Format
4-5154002	Kit	5 x 1.0 mL
4-5154004	Kit	50 x 1.0 mL

**Factor VIII deficient plasma immunads. is used in the determination of Coagulation Factor VIII by one-stage method based on the Activated Partial Thromboplastin Time (aPTT).**

The Factor VIII deficient plasma immunads. is an immune-adsorbed lyophilised, stabilised human plasma with a Factor VIII content of <1%, prepared from HIV 1/2 Ab negative plasmas.



### Informations

Factor VIII is a glycoprotein synthesized primarily by the liver.

It circulates in plasma in a VWF-bound form that protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will be complexed with FIXa in the presence of phospholipids to activate FX in FXa. A patient with FVIII deficiency has hemophilia A.

### Components

- 5 or 50 vials of 1 mL lyophilized plasma



# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR XIII

IMMUNO ADSORBED DEFICIENT PLASMAS

Lyophilized plasmas



## Factor XIII Deficient Plasma



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

FXIII (FXIII) connects the amino group of lysine to glutamine through its enzymatic function (transamidase activity), thus leading to the creation of a fibrin molecule network. Thrombin converts FXIII to FXIIIa.

Reference	Presentation	Format
4-5194104	Kit	5 x 1.0 mL

### Plasma kit deficient in FXIII.

Factor XIII Deficient Plasma is immuno-adsorbed, stabilized and lyophilized human plasma prepared from plasma.

### Components

- 5 vials x 1 mL lyophilized plasma

### Characteristics

- Plasmas verified negative for HIV (anti-HIV negative antibody).
- Lyophilized plasmas are certified to have less than 1% for the deficient factor considering that all other coagulation factors have normal values.



# LYOPHILIZED IMMUNODEPLETED DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### KININOGEN

IMMUNO ADSORBED DEFICIENT PLASMAS

## Fitzgerald Trait Plasma

Lyophilized plasmas



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

Fletcher Trait Plasma

Reference	Presentation	Format	Number of tests
4-5204006	Vial	2 x 1.0 mL	40

### Plasma deficient for kininogen assay.

Fitzgerald Trait Plasma is a lyophilized human plasma immuno-adsorbed in high molecular weight kininogen (HMW-kininogen) with a coagulant activity <1% for the kininogen.



### Informations

Fitzgerald Trait Plasma is used to detect HMW-kininogen deficiency. HMW-kininogens are plasma glycoproteins involved in the initiation of blood coagulation. A deficiency in HMW-kininogen prolongs the activated partial thromboplastin time (TCA), especially if the reagent used contains silica or kaolin, it is less if the activator used is elagic acid. A deficiency in HMW-kininogen does not cause a bleeding tendency even in the event of deep deficiency.

The prolongation of the TCA can be corrected by the addition of control plasma, plasma deficient in FXII or by the addition of plasma deficient in prekallikrein (Fletcher trait plasma). In addition to this coagulation effect, Fitzgerald Trait Plasma alters fibrinolysis, kinin formation and the permeability of the vascular membrane.

### Components

- 2 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient plasma of human origin, stabilized and lyophilized with an activity <1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Deficient plasma obtained by immunoabsorption.



# LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR VIII

NATIVE DEFICIENT PLASMAS

Lyophilized plasmas



## Factor VIII Deficient Plasma Native



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

Reference	Presentation	Format	Number of tests
4-5154007	Vial	5 x 1.0 mL	100
4-5154016	Vial	50 x 1.0 mL	1 000

### Plasma deficient for the determination of Factor VIII.

Native Factor VIII Deficient Plasma is made from a pool of plasmas from hemophiliac A donors, native (congenital deficiency), lyophilized, having a coagulant activity <1% for FVIII. All other coagulation factors have normal values. VWF level is normal.

### Informations

Factor VIII is a glycoprotein mainly synthesized by the liver.

It circulates in the plasma in the form bound to VWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa.

A patient who is deficient in FVIII has hemophilia A.

### Components

- 5 or 50 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient human plasma, stabilized and lyophilized with an activity <1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Native FVIII deficient plasma is used for the determination of FVIII by a one-step method based on Activated Cephalin Time (TCA).
- Does not contain inhibitors.



# LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR IX

NATIVE DEFICIENT PLASMAS

Lyophilized plasmas



## Factor IX Deficient Plasma Native



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

Reference	Presentation	Format	Number of tests
4-5164008	Vial	5 x 1.0 mL	100
4-5164016	Vial	50 x 1.0 mL	1 000

### Plasma deficient for Factor IX assay.

Native Factor IX Deficient Plasma is a freeze-dried, native (congenital deficiency) hemophilia B donor plasma pool with a coagulant activity <1% for FIX. All other coagulation factors have normal values.

### Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver. FIX can be activated to FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

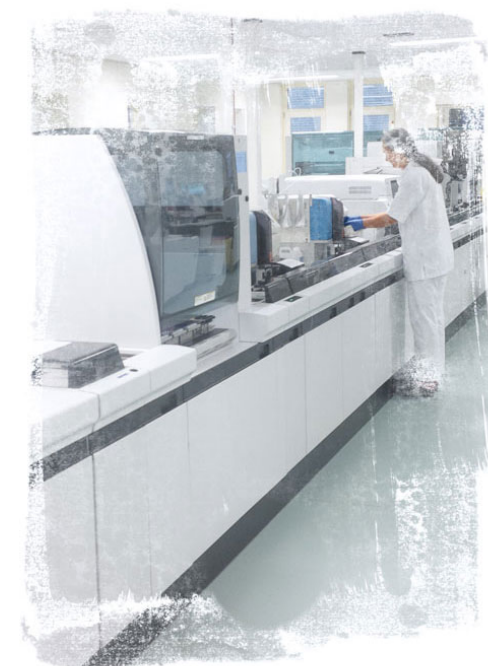
A person who is deficient in FIX has hemophilia B.

### Components

- 5 or 50 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient human plasma, stabilized and lyophilized with an activity <1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Native FIX deficient plasma is used for the determination of FIX by a one-step method based on Cephalin-Kaolin Time (TCK).
- Does not contain inhibitors



# LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR XI

NATIVE DEFICIENT PLASMAS

Lyophilized plasmas



## Factor XI Deficient Plasma Native



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

Reference	Presentation	Format	Number of tests
4-5184004	Vial	5 x 1.0 mL	100

### Plasma deficient for Factor XI assay.

Native Factor XI Deficient Plasma is a pool of freeze-dried FXI-deficient, native (congenital deficiency) donor plasmas with a coagulant activity  $\leq 3\%$  for FXI.



### Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic pathway of coagulation.

It is activated by FXIIa to FXIa which will itself activate FIX in the presence of calcium ions.

### Components

- 5 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient human plasma, stabilized and lyophilized with an activity  $\leq 3\%$  of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Native FXI deficient plasma is used for the determination of FXI by a one-step method based on Activated Cephalin Time (TCA).





# LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### FACTOR XII

NATIVE DEFICIENT PLASMAS

Lyophilized plasmas



## Factor XII Deficient Plasma Native



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

Reference	Presentation	Format	Number of tests
4-5194008	Vial	5 x 1.0 mL	100

### Plasma deficient for Factor XII assay.

Native Factor XII Deficient Plasma is a pool of donor plasmas deficient in FXII, native (congenital deficiency), lyophilized, with a coagulant activity <3% for FXII.



### Informations

Factor XII (FXII) is a glycoprotein synthesized by the liver. FXII participates in the contact phase which initiates the intrinsic pathway of coagulation.

Activated on contact with a negatively charged surface, it becomes capable of activating prekallikrein and kallikrein (amplified by KHPM) then FXI to FXIa in the presence of KHPM.

The FXIa thus formed activates the FXII in FXIIa, amplifying the reaction.

### Components

- 5 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient human plasma, stabilized and lyophilized with an activity <3% of the corresponding coagulation factor.
- All other coagulation factors have normal values.
- Native FXII deficient plasma is used for the determination of FXII by a one-step method based on Activated Cephalin Time (TCA).



# LYOPHILIZED CONGENITAL DEFICIENT PLASMAS

## INTRINSIC PATHWAY

### PREKALLIKREIN

NATIVE DEFICIENT PLASMAS

## Fletcher Trait Plasma

Lyophilized plasmas



### Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

### Informations

Prekallikrein is a vitamin K-dependent glycoprotein non-covalently complexed with high molecular weight kininogen. It participates in the activation of coagulation depending on the surface, in fibrinolysis, in the generation of kinins and in inflammatory phenomena.

The prekallikrein deficits prolong the activated partial thromboplastin time (TCA), which varies according to the reagents (significant lengthening with silica or kaolin), without modification of the other coagulation tests.

The TCA can be corrected by adding control plasma and in the absence of deficiency in FVIII, FIX, FXI, FXII.

Reference	Presentation	Format	Number of tests
4-5205006	Vial	2 x 1.0 mL	40

### Plasma deficient for the determination of prekallikrein.

Fletcher Trait Plasma is a human plasma, deficient in prekallikrein, lyophilized, with a coagulant activity <1% for prekallikrein.

### Components

- 2 vials x 1 mL lyophilized plasma

### Characteristics

- Deficient human plasma, stabilized and lyophilized with an activity <1% of the corresponding coagulation factor.
- All other coagulation factors have normal values.



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FVIII INHIBITOR NIJMEGEN BETHESDA ASSAYS

INHIBITOR DOSAGE BOXES

Nijmegen Bethesda Assay



# Factor VIII Inhibitor Reagent Kit (Bethesda Units)



### Associated products

Factor VIII Inhibitor Reagent Kit (Bethesda Units)

HCV neg

Factor VIII Deficient Plasma, immunads.

Coagulation Reference

DAPTIN® TC

Solution CaCl<sub>2</sub> 25 mM

TECHNOCHROM® FVIII:C

### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by a Bethesda test and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

Reference	Presentation	Number of tests
4-5152005	Kit	2 to 4

**This kit, intended for use in the clinical laboratory, is used to standardize the preparation of samples for the assay of inhibitors by the modified Bethesda Nijmegen method.**

Intended for use in the clinical laboratory when performing the modified Bethesda or Bethesda Nijmegen assay.

### Components

- 2 x 3 mL vials of Factor VIII normal plasma
- 1 vial of 1 mL of Factor VIII inhibitor plasma
- 1 vial of 1 mL of plasma without Factor VIII inhibitor
- 1 vial of Imidazole buffer of 17 mL

### Characteristics

- Stability for 1 month after reconstitution



## INHIBITOR NIJMEGEN BETHESDA ASSAYS

### FVIII INHIBITOR NIJMEGEN BETHESDA ASSAYS

INHIBITOR DOSAGE BOXES

Nijmegen Bethesda Assay



# Factor VIII Inhibitor Reagent Kit (Bethesda Units) HCV neg



#### Associated products

Factor VIII Deficient Plasma, immunads.

Coagulation Reference

DAPTIN® TC

Solution CaCl<sub>2</sub> 25 mM

TECHNOCHROM® FVIII:C

Reference

4-5152009

Presentation

Kit

Number of tests

2 to 4

**This kit, intended for use in the clinical laboratory, is used to standardize the preparation of samples for the assay of inhibitors by the modified Bethesda Nijmegen method.**

Intended for use in the clinical laboratory when performing the modified Bethesda or Bethesda Nijmegen assay.

#### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by a Bethesda test and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

#### Components

- 2 x 3 mL vials of Factor VIII normal plasma
- 1 vial of 1 mL of negative HCV Factor VIII inhibitor plasma
- 1 vial of 1 mL of plasma without Factor VIII inhibitor
- 1 vial of Imidazole buffer of 17 mL

#### Characteristics

- Stability for 1 month after reconstitution



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

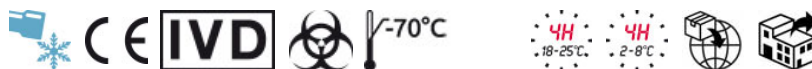
## FVIII INHIBITOR NIJMEGEN BETHESDA ASSAYS

INHIBITOR DOSAGE BOXES

Nijmegen Bethesda Assay



# CRYOcheck™ Factor VIII Inhibitor Kit



### Associated products

CRYOcheck™ Factor VIII Deficient Plasma

CRYOcheck™ Chromogenic Factor VIII

Factor IX Inhibitor Plasma Negative Control

Factor IX Inhibitor Plasma Weak Control

Factor VIII Deficient Plasma Native

Factor VIII Inhibitor Plasma Negative Control

Factor VIII Inhibitor Plasma

Factor VIII Inhibitor Plasma HCV neg

Factor VIII Inhibitor Plasma Weak Control

TECHNOCHROM® FVIII:C

### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by a Bethesda test and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

Reference	Presentation	Number of tests
CCIK08	Kit	10

**This kit, intended for use in the clinical laboratory, serves to standardize the preparation of samples for the assay of inhibitors by the modified Bethesda-Nijmegen method.**

This kit is the ideal solution for laboratories wishing to use standardized sample preparations in order to limit the variability of anti-FVIII antibody assays.



### Components

- 10 vials x pool of normal plasma buffered with imidazole (1.5 mL)
- 10 vials x imidazole buffer containing bovine serum albumin (1.5 mL)
- 5 vials x negative control (0.5 mL)
- 5 vials x positive control (0.5 mL)

### Advantages

- Each kit contains five sets of vials, including positive and negative FVIII inhibitor controls
- Excellent repeatability and reproducibility
- Suitable for multicenter clinical studies
- Excellent linearity
- Convenient frozen format, ready to use in minutes, no reconstitution errors

### Characteristics

It allows the determination of the titre of a functional FVIII inhibitor to contribute to the clinical management of congenital hemophilia A in patients over 2 years of age.

The kit provides imidazole buffered plasma, imidazole buffer, and negative and positive controls that improve the repeatability and reproducibility of the assay method. This kit must be associated with a measurement of the activity of Factor VIII by chromometric method on citrated human plasma.

Expiration date of 3 years from the date of manufacture with storage at -70 °C.

# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FVIII INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Lyophilized plasmas



### Factor VIII Inhibitor Plasma



#### Associated products

CRYOcheck™ Factor VIII Inhibitor Kit  
 Factor IX Inhibitor Plasma Negative Control  
 Factor IX Inhibitor Plasma Weak Control  
 Factor VIII Inhibitor Plasma Negative Control  
 Factor VIII Inhibitor Plasma HCV neg  
 Factor VIII Inhibitor Plasma Weak Control

#### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by the Bethesda assays or modified Nijmegen Bethesda and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

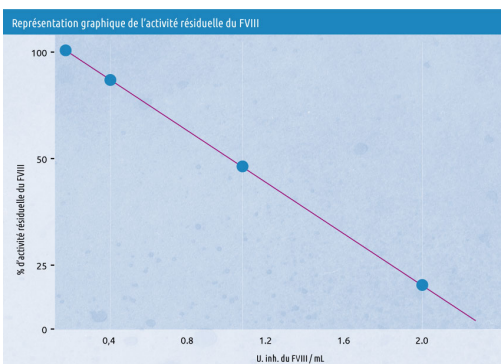
Reference	Presentation	Format
4-5159008	Vial	5 x 1.0 mL

**Human hemophilia A plasma containing a natural anti-FVIII inhibitor. This plasma can be used for the control of the determination of Factor VIII (FVIII) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

Factor VIII Inhibitor control plasma is human hemophilia A plasma containing a specific natural antibody directed against FVIII (FVIII: C) activity.

#### Components

- 5 vials x 1 mL lyophilized plasma



#### Characteristics

Plasma with Factor VIII inhibitor can be used :

- As a plasma sample from a patient with hemophilia A with a Factor VIII inhibitor
- For accuracy control of Factor VIII inhibitor determination based on the Bethesda Test
- Title in Bethesda Unit depending on lots and tests
- 1 month stability after reconstitution



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FVIII INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Lyophilized plasmas



### Factor VIII Inhibitor Plasma HCV neg



#### Associated products

CRYOcheck™ Factor VIII Inhibitor Kit  
 Factor IX Inhibitor Plasma Negative Control  
 Factor IX Inhibitor Plasma Weak Control  
 Factor VIII Inhibitor Plasma Negative Control  
 Factor VIII Inhibitor Plasma  
 Factor VIII Inhibitor Plasma Weak Control

#### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by the Bethesda assay or modified Nijmegen Bethesda and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

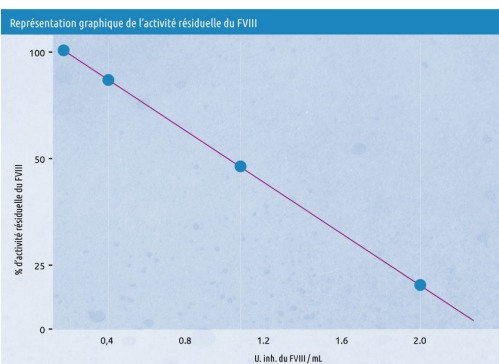
Reference	Presentation	Format
4-5159010	Vial	5 x 1.0 mL

**Human plasma depleted in Factor VIII containing an added anti-FVIII inhibitor. This plasma can be used for the negative control of the determination of Factor VIII (FVIII) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

The FVIII Inhibitor Control Plasma, HCV negative, is a normal human plasma immuno-absorbed with an added specific inhibitory antibody, directed against the activity of factor VIII (FVIII: C).

#### Components

- 5 vials x 1 mL lyophilized plasma



#### Characteristics

Plasma with HCV negative FVIII inhibitor can be used :

- As a control for determining the Bethesda Units (BU) title
- Title in Bethesda Unit depending on lots and tests
- For the accuracy control of the FVIII inhibitor determination based on the Bethesda test
- 1 month stability after reconstitution



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

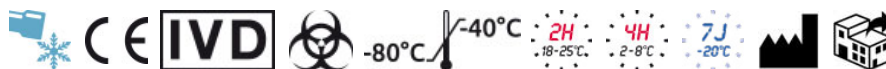
## FVIII INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Nijmegen Bethesda Controls



### Factor VIII Inhibitor Plasma Weak Control



#### Associated products

- CRYOcheck™ Factor VIII Inhibitor Kit
- Factor IX Inhibitor Plasma Negative Control
- Factor IX Inhibitor Plasma Weak Control
- Factor VIII Inhibitor Plasma Negative Control
- Factor VIII Inhibitor Plasma
- Factor VIII Inhibitor Plasma HCV neg

#### Informations

Treatment for hemophilia A consists of injecting the missing factor VIII I.V. to prevent or stop bleeding. A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by the Bethesda assays or modified Nijmegen Bethesda and is expressed in BU. 1BU neutralizes 50% of the activity of FVIII for hemophilia A.

Reference	Presentation	Format
6-1800-05	Vial	25 x 0.5 mL

**Factor VIII deficient plasma without Factor VIII inhibitor.**  
**This plasma can be used for the control of the determination of Factor VIII (FVIII) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

Factor VIII Inhibitor Plasma Weak Control is made from a pool of Factor VIII deficient (<1%) human plasma.  
 It contains a specific natural inhibitor directed against the activity of Factor VIII (FVIII).

#### Components

- 25 cryotubes x 0.5 mL of frozen plasma

#### Characteristics

Control titrated to the cut-off value according to HAS recommendations.

- The stability of the product is 7 days at -20 °C
- Bethesda Unit title depending on lots and tests (close to 1.5 Bethesda Unit)





# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FVIII INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Nijmegen Bethesda Controls



# Factor VIII Inhibitor Plasma Negative Control



### Associated products

CRYOcheck™ Factor VIII Inhibitor Kit

Factor IX Inhibitor Plasma Negative Control

Factor IX Inhibitor Plasma Weak Control

Factor VIII Inhibitor Plasma

Factor VIII Inhibitor Plasma HCV neg

Factor VIII Inhibitor Plasma Weak Control

Reference

Presentation

Format

6-1850-05

Vial

25 x 0.5 mL

**Factor VIII deficient plasmas without Factor VIII inhibitor.**

**This plasma can be used for the negative control of the determination of Factor VIII (FVIII) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

Factor VIII Inhibitor Plasma Negative Control is made from a pool of Factor VIII deficient (<1%) human plasma.

It contains a specific natural inhibitor directed against the activity of Factor VIII (FVIII).

### Informations

Treatment for hemophilia A consists of injecting the missing Factor VIII by I.V. to prevent or stop the bleeding.

A majority of the complications of this treatment are the development of antibodies against FVIII, called inhibitors.

The development of an anti-FVIII inhibitor leads to episodes of bleeding that are difficult to control.

The activity of the inhibitor is measured by the Bethesda assay or modified Nijmegen Bethesda and is expressed in BU.

1BU neutralizes 50% of the activity of FVIII for hemophilia A.

### Components

- 25 cryotubes x 0.5 mL of frozen plasma



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FIX INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Nijmegen Bethesda Controls



### Factor IX Inhibitor Plasma Weak Control



#### Associated products

- CRYOcheck™ Factor VIII Inhibitor Kit
- Factor IX Inhibitor Plasma Negative Control
- Factor VIII Inhibitor Plasma Negative Control
- Factor VIII Inhibitor Plasma
- Factor VIII Inhibitor Plasma HCV neg
- Factor VIII Inhibitor Plasma Weak Control

#### Informations

Treatment for hemophilia B involves injecting the missing Factor IX I.V. to prevent or stop bleeding. A majority of the complications of this treatment are the development of antibodies against FIX, called inhibitors.

The development of an anti-FIX inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by the Bethesda assays or modified Nijmegen Bethesda and is expressed in BU. 1BU neutralizes 50% of the activity of FIX for hemophilia B.

Reference	Presentation	Format
6-1900-ID	Vial	25 x 0.5 mL

#### Factor IX deficient plasma without Factor IX inhibitor.

**This plasma can be used for the control of the determination of Factor IX (FIX) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

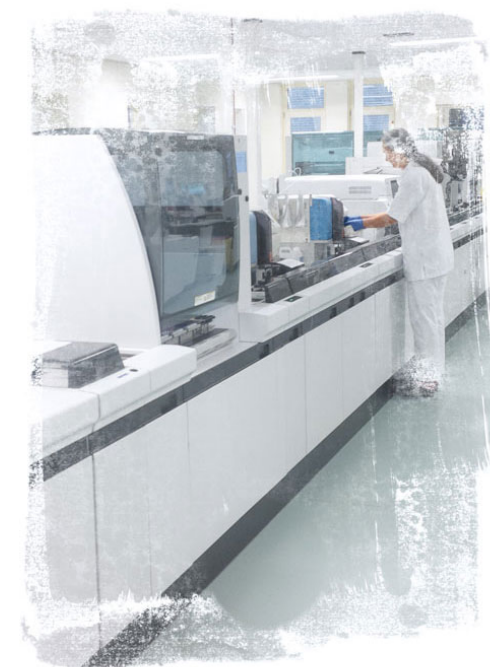
Factor IX Inhibitor Plasma Weak Control is produced from factor IX deficient human plasma to which an inhibitor antibody was added in order to provide a precise neutralizing activity.

#### Components

- 25 cryotubes x 0.5 mL of frozen plasma

#### Characteristics

All other coagulation factors have normal values. The inhibitory capacity is indicated in Bethesda-Nijmegen Units/mL on the certificate of analysis. Control titrated to the cut-off value according to HAS recommendations.



# INHIBITOR NIJMEGEN BETHESDA ASSAYS

## FIX INHIBITOR NIJMEGEN BETHESDA CONTROLS

INHIBITOR CONTROLS

Nijmegen Bethesda Controls



### Factor IX Inhibitor Plasma Negative Control



#### Associated products

- CRYOcheck™ Factor VIII Inhibitor Kit
- Factor IX Inhibitor Plasma Weak Control
- Factor VIII Inhibitor Plasma Negative Control
- Factor VIII Inhibitor Plasma
- Factor VIII Inhibitor Plasma HCV neg
- Factor VIII Inhibitor Plasma Weak Control

#### Informations

Treatment for hemophilia B involves injecting the missing Factor IX I.V. to prevent or stop bleeding. A majority of the complications of this treatment are the development of antibodies against FIX, called inhibitors.

The development of an anti-FIX inhibitor leads to episodes of bleeding that are difficult to control. The activity of the inhibitor is measured by the Bethesda assays or modified Nijmegen Bethesda and is expressed in BU. 1BU neutralizes 50% of the activity of FIX for hemophilia B.

Reference	Presentation	Format
6-1950-05	Vial	25 x 0.5 mL

**Factor IX deficient plasmas without Factor IX inhibitor.**  
**This plasma can be used for the negative control of the determination of Factor IX (FIX) inhibitor according to the Bethesda assays or modified Nijmegen Bethesda assays.**

Factor IX Inhibitor Plasma Negative Control is made from a pool of Factor IX deficient (<1%) human plasma. It does not contain any specific natural inhibitor directed against the activity of Factor IX (FIX).

#### Components

- 25 cryotubes x 0.5 mL of frozen plasma



## ANTICOAGULANT MONITORING

ANTI-Xa

ORGARAN®

ANTICOAGULANT CALIBRATORS

Lyophilized plasmas



## TECHNOVIEW® Orgaran® Cal Set



## Associated products

TECHNOVIEW® Orgaran® Cont High

TECHNOVIEW® Orgaran® Cont Low

## Informations

Danaparoid sodium (Orgaran®) is a polysaccharide anticoagulant, used as an alternative treatment to unfractionated heparins and low molecular weight heparins when the latter are contraindicated.

Reference	Presentation	Format
4-5090110	Vial	5 x 1.0 mL

## Calibration plasma for the determination of sodium danaparoid (Orgaran®).

TECHNOVIEW® Orgaran® Calibrator calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of Orgaran®. The kit includes a set of 5 calibrators from 0 to 1.6 IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Orgaran® calibrator and control plasmas are prepared from citrated plasmas supplemented with different concentrations of sodium danaparoid.



## ANTICOAGULANT MONITORING

ANTI-Xa

ORGARAN®

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Orgaran® Cont Low



## Associated products

TECHNOVIEW® Orgaran® Cal Set

TECHNOVIEW® Orgaran® Cont High

## Informations

Danaparoid sodium (Orgaran®) is a polysaccharide anticoagulant, used as an alternative treatment to unfractionated heparins and low molecular weight heparins when the latter are contraindicated.

Reference	Presentation	Format
4-5090112	Vial	5 x 1.0 mL

## Low control plasmas for the Orgaran® assay.

TECHNOVIEW® Orgaran® Control Low quality control plasmas are titrated to approximately 0.5 IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Orgaran® plasmas are prepared from citrated plasmas supplemented with different concentrations of sodium danaparoid. They make it possible to validate the sodium danaparoid calibration curve.



## ANTICOAGULANT MONITORING

ANTI-Xa

ORGARAN®

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Orgaran® Cont High



## Associated products

TECHNOVIEW® Orgaran® Cal Set

TECHNOVIEW® Orgaran® Cont Low

## Informations

Danaparoid sodium (Orgaran®) is a polysaccharide anticoagulant, used as an alternative treatment to unfractionated heparins and low molecular weight heparins when the latter are contraindicated.

Reference	Presentation	Format
4-5090114	Vial	5 x 1.0 mL

**High control plasmas for the Orgaran® assay.**

TECHNOVIEW® Orgaran® Control High quality control plasmas are titrated to approximately 1.0 IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Orgaran® plasmas are prepared from citrated plasmas supplemented with different concentrations of sodium danaparoid. They make it possible to validate the sodium danaparoid calibration curve.



## ANTICOAGULANT MONITORING

ANTI-Xa  
ARIXTRA®

ANTICOAGULANT CALIBRATORS

Lyophilized plasmas



## TECHNOVIEW® Arixtra® Cal Set



## Associated products

TECHNOVIEW® Arixtra® Cont High

TECHNOVIEW® Arixtra® Cont Low

## Informations

Arixtra® (fondaparinux sodium), is a pentasaccharide derived from the portion of heparin that binds to antithrombin and inhibits FXa. Arixtra® is obtained by chemical synthesis, while anticoagulants of the heparin family are of animal origin.

It is used as a preventive measure for venous thromboembolic events or used as a treatment for venous thrombosis.

Reference	Presentation	Format
4-5090010	Vial	5 x 1.0 mL

## Calibration plasma for the Arixtra® assay

TECHNOVIEW® Arixtra® Cal Set calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of Arixtra®. The kit includes a set of 5 calibrators from 0 to 2 µg / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Arixtra® Cal Set and Cont Low and High plasmas are prepared from citrated plasmas supplemented with different concentrations of Arixtra® (fondaparinux sodium). They allow validation of the calibration curve for Arixtra® assays in plasma, in particular with anti-FXa assay methods. The calibration curve encompasses the current concentrations obtained during treatment with Arixtra®.



## ANTICOAGULANT MONITORING

ANTI-Xa  
ARIXTRA®

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Arixtra® Cont Low



## Associated products

TECHNOVIEW® Arixtra® Cal Set

TECHNOVIEW® Arixtra® Cont High

## Informations

Arixtra® (fondaparinux sodique), est un pentasaccharide dérivé de la portion de l'héparine qui se lie à l'antithrombine et inhibe le FXa.

L'Arixtra® est obtenu par synthèse chimique, alors que les anticoagulants de la famille de l'héparine sont d'origine animale.

Il est utilisé à titre préventif pour les accidents thromboemboliques veineux ou utilisé comme traitement pour des thromboses veineuses.

Reference	Presentation	Format
4-5090012	Vial	6 x 1.0 mL

**Low control plasmas for the Arixtra® assay.**

Les plasmas de contrôle de qualité TECHNOVIEW® Arixtra® Control Low sont titrés à environ 0,5 µg/mL, optimisés pour les méthodes anti-FXa.

## Components

- 6 vials x 1 mL lyophilized plasma

## Characteristics

Les plasmas TECHNOVIEW® Arixtra® Cal Set et Cont Low et High sont préparés à partir de plasmas citratés supplémentés avec différentes concentrations d'Arixtra® (fondaparinux sodique). Ils permettent la validation de la courbe de calibration pour les dosages de Arixtra® dans le plasma, notamment avec les méthodes de dosages anti-FXa.

La courbe de calibration englobe les concentrations courantes obtenues lors d'un traitement avec de l'Arixtra®.





## ANTICOAGULANT MONITORING

ANTI-Xa

ARIXTRA®

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Arixtra® Cont High



## Associated products

TECHNOVIEW® Arixtra® Cal Set

TECHNOVIEW® Arixtra® Cont Low

## Informations

Arixtra® (fondaparinux sodium), is a pentasaccharide derived from the portion of heparin that binds to antithrombin and inhibits FXa.

Arixtra® is obtained by chemical synthesis, while anticoagulants of the heparin family are of animal origin.

It is used as a preventive measure for venous thromboembolic events or used as a treatment for venous thrombosis.

Reference	Presentation	Format
4-5090014	Vial	6 x 1.0 mL

## Control plasmas for the Arixtra® assay.

TECHNOVIEW® Arixtra® Control High quality control plasmas are titrated to approximately 1.5 µg / mL, optimized for anti-FXa methods.

## Components

- 6 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Arixtra® Cal Set and Cont Low and High plasmas are prepared from citrated plasmas supplemented with different concentrations of Arixtra® (fondaparinux sodium). They allow validation of the calibration curve for Arixtra® assays in plasma, in particular with anti-FXa assay methods. The calibration curve encompasses the current concentrations obtained during treatment with Arixtra®.



## ANTICOAGULANT MONITORING

ANTI-Xa

UFH

ANTICOAGULANT CALIBRATORS

Colorimetric assay



## TECHNOVIEW® UFH Cal Set



## Associated products

TECHNOVIEW® UFH Cont High

TECHNOVIEW® UFH Cont Low

## Informations

Unfractionated heparins (UFH) are sulfated mucopolysaccharides. Often used in the prevention and management of venous and arterial thromboembolic events.

They bind to antithrombin and thus increase its inhibitory effect on coagulation factors (mainly FXa and thrombin).

Reference	Presentation	Format
4-5090070	Vial	5 x 1.0 mL

## Calibration plasma for the determination of unfractionated heparins (UFH).

TECHNOVIEW® UFH Calibrator plasmas are prepared from citrated plasmas supplemented with different concentrations of unfractionated heparins. The kit includes a set of 5 UFH calibrators, 0 to 1.4 IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins.  
Stability after reconstitution is 1 month at -20 °C.



Dosage	Gamme d'essai	Limite de détection
Fondaparinux (Arixtra®)	0,07 – 2,04 µg/mL	0,07 µg/mL
LMWH	0,05 – 1,62 IU/mL	0,05 IU/mL
UFH	0,06 – 1,49 IU/mL	0,06 IU/mL
Danaparoid (Orgaran®)	0,08 – 1,60 IU/mL	0,08 IU/mL
Rivaroxaban (Xarelto®)	10 – 700 ng/mL	10 ng/mL



## ANTICOAGULANT MONITORING

ANTI-Xa  
UFH

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® UFH Cont Low



## Associated products

TECHNOVIEW® UFH Cal Set

TECHNOVIEW® UFH Cont High

## Informations

Unfractionated heparins (UFH) are sulfated mucopolysaccharides.

Often used in the prevention and management of venous and arterial thromboembolic events.

They bind to antithrombin and thus increase its inhibitory effect on coagulation factors (mainly FXa and thrombin).

Reference	Presentation	Format
4-5090072	Vial	5 x 1.0 mL

**Control plasmas for the determination of unfractionated heparins (UFH).**

TECHNOVIEW® UFH Control Low quality control plasmas are titrated at  $\approx 0.2$  IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1mL of lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins.  
Stability after reconstitution is 1 month at  $-20$  °C.

Dosage	Gamme d'essai	Limite de détection
Fondaparinux (Arixtra®)	0,07 – 2,04 µg/mL	0,07 µg/mL
LMWH	0,05 – 1,62 IU/mL	0,05 IU/mL
UFH	0,06 – 1,49 IU/mL	0,06 IU/mL
Danaparoid (Orgaran®)	0,08 – 1,60 IU/mL	0,08 IU/mL
Rivaroxaban (Xarelto®)	10 – 700 ng/mL	10 ng/mL



## ANTICOAGULANT MONITORING

ANTI-Xa  
UFH

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® UFH Cont High



## Associated products

TECHNOVIEW® UFH Cal Set

TECHNOVIEW® UFH Cont Low

## Informations

Unfractionated heparins (UFH) are sulfated mucopolysaccharides.

Often used in the prevention and management of venous and arterial thromboembolic events.

They bind to antithrombin and thus increase its inhibitory effect on coagulation factors (mainly FXa and thrombin)

Reference	Presentation	Format
4-5090074	Vial	5 x 1.0 mL

**Control plasmas for the determination of unfractionated heparins (UFH).**

TECHNOVIEW® UFH Control High quality control plasmas are titrated at  $\approx 0.5$  IU / mL, optimized for anti-FXa methods.

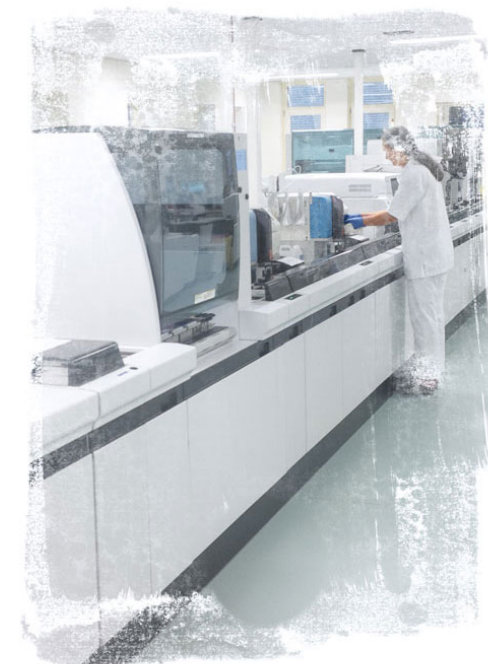
## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins.  
Stability after reconstitution is 1 month at  $-20$  °C

Dosage	Gamme d'essai	Limite de détection
Fondaparinux (Arixtra®)	0,07 – 2,04 µg/mL	0,07 µg/mL
LMWH	0,05 – 1,62 IU/mL	0,05 IU/mL
UFH	0,06 – 1,49 IU/mL	0,06 IU/mL
Danaparoid (Orgaran®)	0,08 – 1,60 IU/mL	0,08 IU/mL
Rivaroxaban (Xarelto®)	10 – 700 ng/mL	10 ng/mL



## ANTICOAGULANT MONITORING

## ANTI-Xa

## ANTI-Xa ASSAYS

COLORIMETRIC ASSAYS

## TECHNOCHROM® anti-Xa

Colorimetric assay



## Informations

Factor X (FX) is a glycoprotein synthesized by the liver, dependent on vitamin K. FX is involved in the common pathway of coagulation.

It is activated in FXa by the FT-FVIIa complex or by the FVIIIa-FIXa complex in the presence of phospholipids.

FXa is neutralized by TFPI and antithrombin.

Reference	Presentation	Number of tests
4-5340250	Kit	80

## Measurement of anticoagulants by colorimetric method.

The Technochrom® anti-Xa kit is a one-step colorimetric assay for the assay of heparinoids and Factor Xa inhibitors in citrated human plasma under hemostasis.

## Components

- 1 vial x 4 mL chromogenic substrate, lyophilized
- 1 vial x 4 mL bovine FXa, lyophilized
- 1 vial x 20 mL Tris-EDTA buffer, pH 8.4

## Characteristics

The assay is based on the inhibition of FXa by antithrombin (AT) in the presence of heparins. The residual FXa hydrolyzes the chromogenic substrate which releases paranitroaniline (pNa).

The measurement is made at 405 nm. The patient's plasma is not supplemented with exogenous AT.

The anti-FXa measurement is therefore related to the antithrombin in the patient's plasma.

Dosage	Gamme d'essai	Limite de détection
Fondaparinux (Arixtra®)	0,07 – 2,04 µg/mL	0,07 µg/mL
LMWH	0,05 – 1,62 IU/mL	0,05 IU/mL
UFH	0,06 – 1,49 IU/mL	0,06 IU/mL
Danaparoid (Orgaran®)	0,08 – 1,60 IU/mL	0,08 IU/mL
Rivaroxaban (Xarelto®)	10 – 700 ng/mL	10 ng/mL



## ANTICOAGULANT MONITORING

ANTI-Xa  
LMW

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® LMW Cal Set



## Associated products

TECHNOVIEW® LMW Cont High

TECHNOVIEW® LMW Cont Low

TECHNOVIEW® LMW Cont Medium

## Informations

Heparins are the most commonly used anticoagulants.

The biological activity of sulfated glycosaminoglycan groups is their ability to accelerate (up to 2000 times) the inhibitory effect of antithrombin (AT) on the coagulation proteases.

It consists of short polysaccharide chains with an average molecular weight of less than 8000 Da.

They are obtained by fractionation of heparin polymers.

Reference	Presentation	Format
4-5090040	Vial	5 x 1.0 mL

**Calibration plasma for the determination of low molecular weight heparins (LMWH).**

TECHNOVIEW® LMW Calibrator calibration plasmas are prepared from citrate plasmas supplemented with different concentrations of low molecular weight heparins.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

The set includes a set of 5 HBPM calibrators, from 0 to 1.6 UI/mL, optimized for anti-FXa methods. TECHNOVIEW® plasmas are prepared from citrate plasmas supplemented with different levels of heparins.

The TECHNOVIEW® LMW cal set and plasma control units allow the calibration curve to be validated for the measurement of HBPM in plasma, especially with anti-FXa methods.



## ANTICOAGULANT MONITORING

ANTI-Xa  
LMW

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® LMW Cont Low



## Associated products

TECHNOVIEW® LMW Cal Set

TECHNOVIEW® LMW Cont High

TECHNOVIEW® LMW Cont Medium

## Informations

Heparin is the most commonly used anticoagulant. The biological activity of sulfated glycosaminoglycans groups lies in their ability to accelerate (up to 2000 times) the inhibitory effect of antithrombin (AT) on coagulation proteases. It consists of short polysaccharide chains with an average molecular weight of less than 8000 Da. They are obtained by fractionation of heparin polymers.

Reference	Presentation	Format
4-5090042	Vial	5 x 1.0 mL

**Low control plasmas for the determination of low molecular weight heparins (LMWH).**

TECHNOVIEW® LMW Control Low quality control plasmas are titrated  $\approx 0.4$  IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins. The TECHNOVIEW LMW control Low and control plasma boxes are used to validate the calibration curve for the measurement of LMWH in plasma, especially with anti-FXa methods.



## ANTICOAGULANT MONITORING

ANTI-Xa  
LMW

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® LMW Cont Medium



## Associated products

TECHNOVIEW® LMW Cal Set

TECHNOVIEW® LMW Cont High

TECHNOVIEW® LMW Cont Low

## Informations

Heparin is the most commonly used anticoagulant. The biological activity of sulfated glycosaminoglycans groups lies in their ability to accelerate (up to 2000 times) the inhibitory effect of antithrombin (AT) on coagulation proteases. It consists of short polysaccharide chains with an average molecular weight of less than 8000 Da. They are obtained by fractionation of heparin polymers.

Reference	Presentation	Format
4-5090044	Vial	5 x 1.0 mL

**Medium control plasmas for the determination of low molecular weight heparins (LMWH).**

TECHNOVIEW® LMW Control Medium quality control plasmas are titrated  $\approx 0.9$  IU / mL, optimized for anti-FXa methods.



## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins. The TECHNOVIEW LMW control Medium and control plasma boxes are used to validate the calibration curve for the measurement of LMWH in plasma, especially with anti-FXa methods.





## ANTICOAGULANT MONITORING

ANTI-Xa  
LMW

ANTICOAGULANT CONTROLS

Colorimetric assay



## TECHNOVIEW® LMW Cont High



## Associated products

TECHNOVIEW® LMW Cal Set

TECHNOVIEW® LMW Cont Low

TECHNOVIEW® LMW Cont Medium

## Informations

Heparin is the most commonly used anticoagulant. The biological activity of sulfated glycosaminoglycans groups lies in their ability to accelerate (up to 2000 times) the inhibitory effect of antithrombin (AT) on coagulation proteases. It consists of short polysaccharide chains with an average molecular weight of less than 8000 Da. They are obtained by fractionation of heparin polymers.

Reference	Presentation	Format
4-5090046	Vial	5 x 1.0 mL

**High control plasmas for the determination of low molecular weight heparins (LMWH).**

TECHNOVIEW® LMW Control Low quality control plasmas are titrated  $\approx 0.4$  IU / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® plasmas are prepared from citrated plasmas supplemented with different concentrations of heparins. The TECHNOVIEW LMW cont High and plasma boxes are used to validate the calibration curve for the measurement of LMWHs in plasma, especially with anti-FXa methods.



## ANTICOAGULANT MONITORING

## ANTI-IIa

## HEPARIN NEUTRALIZATION

AUXILIARY REAGENTS

Neutralizing

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFH

## Associated products

Solution CaCl<sub>2</sub> 25 mM

## Informations

Heparin is widely used in hospitals as an anticoagulant. Unfractionated heparin is usually monitored using TCA and thrombin time tests. Often, plasma samples are not identified as containing heparin and may be present as an unexpected contaminant.

So, the reason for prolonged TCA or KCT testing may not be apparent, and laboratory testing may not be straightforward.

Laboratories may find it useful to have a simple method of confirming the presence of heparin before proceeding with further investigations as needed.

TCA : temps de caphaline activé

KCT : kaolin clotting time

SACT : surface activated clotting time

NaPTT : Nonactivated partial thromboplastin time

Reference	Presentation	Format	Number of tests
20-X9107	Vial	5 x 10 mL	1000

**Solution of calcium chloride CaCl<sub>2</sub> 0.025M which neutralizes the effect of unfractionated heparins UFH on the TCA, KCT, SACT or NAPTT tests.**



## Components

- 5 vials x 10 mL solution of calcium chloride CaCl<sub>2</sub> 0.025M

## Advantages

- Ready-to-use solution  
- HRRS is a simple and unique product that plays an important role in routine testing.

## Characteristics

Heparin Resistant Recalcification Solution (HRRS) containing 0.025 M of calcium salts with polybrene, preservatives, blue marker dye and buffers.

## ANTICOAGULANT MONITORING

## ANTI-IIa

## ANTI-IIa ASSAYS

CHRONOMETRIC DOSAGE SETS

## TECHNOCLOT® DTI

Chronometric assay



## Informations

Dabigatran is a potent, direct, competitive and reversible thrombin inhibitor. It inhibits free and fibrin-bound thrombin and thrombin-induced platelet aggregation.

DTI : Direct Thrombin Inhibitors

UFH : Unfractionated heparin

LMWH : Low molecular weight heparin

Reference	Presentation	Number of tests
4-5100025	Kit	2 x 20

## Measurement of dabigatran by anti-Factor IIa chronometric method in plasma

Determination of the anti-factor IIa anticoagulant activity by the chronometric method in hemostasis of the direct thrombin inhibitors (DTI) dabigatran in human citrated plasma.



## Components

- 2 vials x 2 mL lyophilized normal plasma
- 2 vials x 2 mL of lyophilized bovine thrombin

## Advantages

There is no interference from UFH or LMWH up to 1.2 IU / mL.

A correlation coefficient was obtained by comparing the Technoclot DTI kit (Technoclone) with the Hemoclot TI kit (Hyphen) for dabigatran :  $n = 30$   $R^2 = 0.9841$ .

## Characteristics

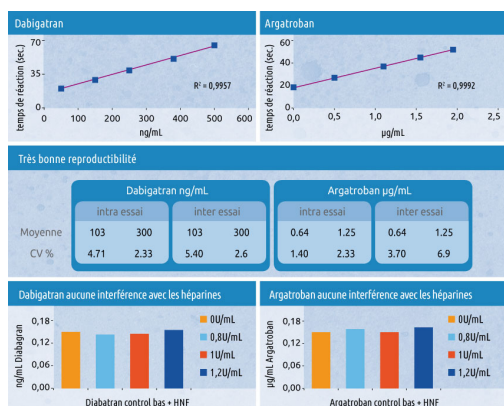
The Technoclot® DTI kit is used for the determination of the anticoagulant activity of the direct thrombin inhibitor (DTI) dabigatran in human citrated plasma.

Dabigatran is an active compound in the oral prodrug, dabigatran etexilate, which has been approved for many indications under the brand name Pradaxa®.

To measure dabigatran in plasma, the patient's plasma is diluted in normal human plasma.

A clot is generated by the addition of thrombin.

The clotting time is directly related to the concentration of dabigatran in the sample plasma.



## ANTICOAGULANT MONITORING

DOAC

EDOXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Edoxaban Cal Set



## Associated products

TECHNOVIEW® Edoxaban Cont High

TECHNOVIEW® Edoxaban Cont Low

TECHNOVIEW® Edoxaban Cont Medium

## Informations

Edoxaban is a direct and reversible highly selective inhibitor of FXa which decreases thrombin formation, prolongs clotting time and reduces the risk of thrombus formation.

Reference	Presentation	Format
4-5090250	Vial	5 x 1.0 mL

## Calibration plasmas for the dosage of edoxaban

TECHNOVIEW® Edoxaban Cal Set calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of edoxaban. The Cal set includes a set of 5 calibrators from 0 to 500 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized human plasma

## Characteristics

TECHNOVIEW® Edoxaban plasmas are prepared from citrated plasmas supplemented with different concentrations of edoxaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

EDOXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Edoxaban Cont Low



## Associated products

TECHNOVIEW® Edoxaban Cal Set

TECHNOVIEW® Edoxaban Cont High

TECHNOVIEW® Edoxaban Cont Medium

## Informations

Edoxaban is a direct and reversible highly selective inhibitor of FXa which decreases thrombin formation, prolongs clotting time and reduces the risk of thrombus formation.

Reference	Presentation	Format
4-5090251	Vial	5 x 1.0 mL

## Low control plasmas for edoxaban dosage

TECHNOVIEW® Edoxaban Control Low quality control plasmas are titrated to approximately 30 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized human plasma

## Characteristics

TECHNOVIEW® Edoxaban plasmas are prepared from citrated plasmas supplemented with different concentrations of edoxaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

EDOXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Edoxaban Cont Medium



## Associated products

TECHNOVIEW® Edoxaban Cal Set

TECHNOVIEW® Edoxaban Cont High

TECHNOVIEW® Edoxaban Cont Low

## Informations

Edoxaban is a direct and reversible highly selective inhibitor of FXa which decreases thrombin formation, prolongs clotting time and reduces the risk of thrombus formation.

Reference	Presentation	Format
4-5090252	Vial	5 x 1.0 mL

## Medium control plasmas for the dosage of edoxaban

TECHNOVIEW® Edoxaban Control Low quality control plasmas are titrated to approximately 125 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized human plasma

## Characteristics

TECHNOVIEW® Edoxaban plasmas are prepared from citrated plasmas supplemented with different concentrations of edoxaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

EDOXYBAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Edoxaban Cont High



## Associated products

TECHNOVIEW® Edoxaban Cal Set

TECHNOVIEW® Edoxaban Cont Low

TECHNOVIEW® Edoxaban Cont Medium

## Informations

Edoxaban is a direct and reversible highly selective inhibitor of FXa which decreases thrombin formation, prolongs clotting time and reduces the risk of thrombus formation.

Reference	Presentation	Format
4-5090253	Vial	5 x 1.0 mL

**High control plasmas for the edoxaban dosage.**

TECHNOVIEW® Edoxaban Control High quality control plasmas are titrated to approximately 400 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized human plasma

## Characteristics

TECHNOVIEW® Edoxaban plasmas are prepared from citrated plasmas supplemented with different concentrations of edoxaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

DABIGATRAN

ANTICOAGULANT CALIBRATORS

Chronometric assay



## TECHNOVIEW® Dabigatran Cal Set



## Associated products

TECHNOVIEW® Dabigatran Cont High

TECHNOVIEW® Dabigatran Cont Low

## Informations

Dabigatran is a potent, direct, competitive and reversible thrombin inhibitor. It inhibits free and fibrin-bound thrombin and thrombin-induced platelet aggregation

Reference	Presentation	Format
4-5090210	Vial	4 x 1.0 mL

**Calibration plasma from 0 to 500 ng / mL for the assay of dabigatran.**

TECHNOVIEW® Dabigatran Calibrator calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of dabigatran. The kit includes a set of 4 calibrators from 0 to 500 ng / mL, optimized for anti-FIIa methods.

## Components

- 4 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Dabigatran plasmas are prepared from citrated plasmas supplemented with different concentrations of dabigatran.





## ANTICOAGULANT MONITORING

DOAC

DABIGATRAN

ANTICOAGULANT CONTROLS

Chronometric assay



## TECHNOVIEW® Dabigatran Cont High



## Associated products

TECHNOVIEW® Dabigatran Cal Set

TECHNOVIEW® Dabigatran Cont Low

## Informations

Dabigatran is a potent, direct, competitive and reversible thrombin inhibitor. It inhibits free and fibrin-bound thrombin and thrombin-induced platelet aggregation.

Reference	Presentation	Format
4-5090212	Vial	5 x 1.0 mL

## High control plasmas for the dabigatran assay.

TECHNOVIEW® Dabigatran High Control quality control plasmas are prepared from supplemented citrated plasmas titrated to approximately 300 ng / mL, optimized for anti-FIIa methods.

## Components

- 5 vials X 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Dabigatran plasmas are prepared from citrated plasmas supplemented with different concentrations of dabigatran.



## ANTICOAGULANT MONITORING

DOAC

DABIGATRAN

ANTICOAGULANT CONTROLS

Chronometric assay



## TECHNOVIEW® Dabigatran Cont Low



## Associated products

TECHNOVIEW® Dabigatran Cal Set

TECHNOVIEW® Dabigatran Cont High

## Informations

Dabigatran is a potent, direct, competitive and reversible thrombin inhibitor. It inhibits free and fibrin-bound thrombin and thrombin-induced platelet aggregation.

Reference	Presentation	Format
4-5090214	Vial	5 x 1.0 mL

## Low control plasmas for dabigatran assay

TECHNOVIEW® Dabigatran Low Control quality control plasmas are prepared from citrated supplemented plasmas titrated to approximately 100 ng / mL, optimized for anti-FIIa methods.

## Components

- 5 vials X 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Dabigatran plasmas are prepared from citrated plasmas supplemented with different concentrations of dabigatran.



## ANTICOAGULANT MONITORING

DOAC

ARGATROBAN

ANTICOAGULANT CALIBRATORS

Chronometric assay



## TECHNOVIEW® Argatroban Cal Set



## Associated products

TECHNOVIEW® Argatroban Cont High

TECHNOVIEW® Argatroban Cont Low

## Informations

Argatroban is a synthetic derivative of L-arginine. It is a direct thrombin inhibitor, which acts independently of antithrombin.

It inhibits the formation of fibrin, the activation of coagulation factors (V, VIII, XIII), the activation of protein C and platelet aggregation.

Reference	Presentation	Format
4-5090140	Vial	5 x 1.0 mL

## Calibration plasma from 0 to 2 µg / mL for argatroban assay.

TECHNOVIEW® Argatroban Calibrator calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of argatroban. The kit includes a set of 5 calibrators from 0 to 2 µg / mL, optimized for anti-FIIa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Argatroban plasmas are prepared from citrated plasmas supplemented with different concentrations of argatroban.



## ANTICOAGULANT MONITORING

DOAC

ARGATROBAN

ANTICOAGULANT CONTROLS

Chronometric assay



## TECHNOVIEW® Argatroban Cont Low



## Associated products

TECHNOVIEW® Argatroban Cal Set

TECHNOVIEW® Argatroban Cont High

## Informations

Argatroban is a synthetic derivative of L-arginine. It is a direct thrombin inhibitor, which acts independently of antithrombin.

It inhibits the formation of fibrin, the activation of coagulation factors (V, VIII, XIII), the activation of protein C and platelet aggregation.

Reference	Presentation	Format
4-5090142	Vial	5 x 1.0 mL

## Control plasmas for argatroban assay.

TECHNOVIEW® Argatroban Low Control quality control plasmas are prepared from citrated supplemented plasmas titrated to approximately 0.7 µg / mL, optimized for anti-factor IIa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Argatroban plasmas are prepared from citrated plasmas supplemented with different concentrations of argatroban.



## ANTICOAGULANT MONITORING

DOAC

ARGATROBAN

ANTICOAGULANT CONTROLS

Chronometric assay



## TECHNOVIEW® Argatroban Cont High



## Associated products

TECHNOVIEW® Argatroban Cal Set

TECHNOVIEW® Argatroban Cont Low

## Informations

Argatroban is a synthetic derivative of L-arginine. It is a direct thrombin inhibitor, which acts independently of antithrombin.

It inhibits the formation of fibrin, the activation of coagulation factors (V, VIII, XIII), the activation of protein C and platelet aggregation.

Reference	Presentation	Format
4-5090144	Vial	5 x 1.0 mL

## Control plasmas for argatroban assay.

TECHNOVIEW® Argatroban High Control quality control plasmas are prepared from supplemented citrated plasmas titrated to approximately 1.2 µg / mL optimized for anti-FIIa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Argatroban plasmas are prepared from citrated plasmas supplemented with different concentrations of argatroban.



## ANTICOAGULANT MONITORING

## DOAC

## RIVAROXABAN

ANTICOAGULANT CONTROLS

Freeze-dried plasmas



## TECHNOVIEW® Rivaroxaban Cal Set



## Associated products

TECHNOVIEW® Rivaroxaban Cont High

TECHNOVIEW® Rivaroxaban Cont Low

TECHNOVIEW® Rivaroxaban Cont Medium

## Informations

Rivaroxaban is a highly selective direct inhibitor of FXa. This inhibition interrupts the intrinsic pathway of the blood coagulation cascade, inhibiting the formation of thrombin and the development of thrombi. It does not inhibit thrombin and has no effect on platelets.

Reference	Presentation	Format
4-5090170	Vial	5 x 1,0 mL

## Calibration plasmas for the determination of rivaroxaban.

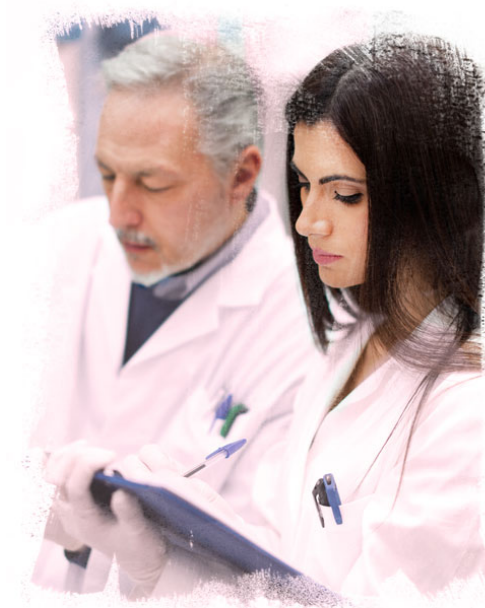
TECHNOVIEW® Rivaroxaban Cal Set calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of rivaroxaban. The Cal Set High kit (4-5090171) includes a set of 5 calibrators from 0 to 500 ng / mL while the Cal Set kit (4-5090170) includes a set of 5 calibrators from 0 to 150 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials of 1 mL of lyophilized plasma.

## Characteristics

TECHNOVIEW® Rivaroxaban (Xarelto®) plasmas are prepared from citrated plasmas supplemented with different concentrations of rivaroxaban (Xarelto®) and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

## DOAC

## RIVAROXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Rivaroxaban Cont Low



## Associated products

TECHNOVIEW® Rivaroxaban Cont High

TECHNOVIEW® Rivaroxaban Cont Medium

## Informations

Rivaroxaban is a highly selective direct inhibitor of FXa.

This inhibition interrupts the intrinsic pathway of the blood coagulation cascade, inhibiting the formation of thrombin and the development of thrombi. It does not inhibit thrombin and has no effect on platelets.

Reference	Presentation	Format
4-5090172	Vial	5 x 1.0 mL

**Low control plasmas for the rivaroxaban assay.**

TECHNOVIEW® Rivaroxaban Control Low quality control plasmas are titrated to approximately 50 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Rivaroxaban (Xarelto®) plasmas are prepared from citrated plasmas supplemented with different concentrations of rivaroxaban (Xarelto®) and calibrated by HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

RIVAROXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Rivaroxaban Cont Medium



## Associated products

TECHNOVIEW® Rivaroxaban Cont High

TECHNOVIEW® Rivaroxaban Cont Low

## Informations

Rivaroxaban is a highly selective direct inhibitor of FXa.

This inhibition interrupts the intrinsic pathway of the blood coagulation cascade, inhibiting the formation of thrombin and the development of thrombus.

It does not inhibit thrombin and has no effect on platelets.

Reference	Presentation	Format
4-5090173	Vial	5 x 1.0 mL

**Medium control plasmas for the rivaroxaban assay.**

TECHNOVIEW® Rivaroxaban Control Medium quality control plasmas are titrated to approximately 150 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Rivaroxaban (Xarelto®) plasmas are prepared from citrated plasmas supplemented with different concentrations of rivaroxaban (Xarelto®) and calibrated by HPLC / MS - MS method.





## ANTICOAGULANT MONITORING

DOAC

RIVAROXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Rivaroxaban Cont High



## Associated products

TECHNOVIEW® Rivaroxaban Cont Low

TECHNOVIEW® Rivaroxaban Cont Medium

## Informations

Rivaroxaban is a highly selective direct inhibitor of FXa.

This inhibition interrupts the intrinsic pathway of the blood coagulation cascade, inhibiting the formation of thrombin and the development of thrombus.

It does not inhibit thrombin and has no effect on platelets.

Reference	Presentation	Format
4-5090174	Vial	5 x 1.0 mL

**High control plasmas for the assay of rivaroxaban.**

TECHNOVIEW® Rivaroxaban Control High quality control plasmas are titrated to approximately 300 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Rivaroxaban (Xarelto®) plasmas are prepared from citrated plasmas supplemented with different concentrations of rivaroxaban (Xarelto®) and calibrated by HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

## DOAC

## DOAC NEUTRALIZATION

AUXILIARY REAGENTS

## DOAC-Stop™

Neutralizing



Reference	Presentation	Format	Number of tests
20-HX9904-100	Tablets	1 x 100	100
20-HX9904-50	Tablets	1 x 50	50

## Informations

The therapeutic uses of NOAC are increasing. NOACs are known to interfere with almost all coagulation tests to varying degrees and sometimes patients who need to be tested for underlying coagulation defects may also be on NOAC.

DOAC-Stop™ is the first general agent available to solve diagnostic problems associated with NOACs. After treatment with DOAC-Stop™, plasma samples can be analyzed for underlying clotting defects such as factor deficiencies, heparin, lupus anticoagulant, or other interfering antibodies.

**Suppresses all types of NOAC, including dabigatran, apixaban, rivaroxaban and edoxaban, with minimal effect on currently known coagulation variables.**

## Components

- 1 vial of 50 or 100 tablets

## Advantages

DOAC-Stop is designed for use on citrated plasma. The tablets are dissolved in the citrated plasma, then after centrifugation, the supernatant containing no more DOAC is ready to be used.



## ANTICOAGULANT MONITORING

## DOAC

## DOAC NEUTRALIZATION

AUXILIARY REAGENTS

Neutralizing



## DOAC-Stop Liquid™



Reference	Presentation	Format	Number of tests
20-X9905-100	Vial	1 x 2.0 mL	100

## Informations

The therapeutic uses of NOAC are increasing. NOACs are known to interfere with almost all coagulation tests to varying degrees and sometimes patients who need to be tested for underlying coagulation defects may also be on NOAC.

DOAC-Stop™ is the first general agent available to solve diagnostic problems associated with NOACs. After treatment with DOAC-Stop™, plasma samples can be analyzed for underlying clotting defects such as factor deficiencies, heparin, lupus anticoagulant, or other interfering antibodies.

**An activated charcoal suspension used to remove Direct Oral Anticoagulants (DOACs), including dabigatran, apixaban, rivaroxaban and edoxaban, with minimal effect on currently known coagulation variables.**

## Components

- 1 glass vial of 2 mL for performing 100 tests

## Advantages

DOAC-Stop Liquid™ is ready to use. Immediately mixes with plasma. Centrifugation eliminated. Instant dispersion in samples.



## ANTICOAGULANT MONITORING

DOAC

APIXABAN

ANTICOAGULANT CALIBRATORS

Lyophilized plasmas



## TECHNOVIEW® Apixaban Cal Set



## Associated products

TECHNOVIEW® Apixaban Cont High

TECHNOVIEW® Apixaban Cont Low

## Informations

Apixaban is a potent, reversible, direct and highly selective inhibitor of the active site of FXa. It does not require antithrombin to exert its antithrombotic activity.

Reference	Presentation	Format
4-5090269	Vial	5 x 1.0 mL

## Calibration plasmas for the assay of apixaban.

TECHNOVIEW® Apixaban Cal Set calibration plasmas are prepared from citrated plasmas supplemented with different concentrations of apixaban. The Cal set includes a set of 5 calibrators from 0 to 500 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Apixaban plasmas are prepared from citrated plasmas supplemented with different concentrations of apixaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

DOAC

APIXABAN

ANTICOAGULANT CONTROLS

Lyophilized plasmas



## TECHNOVIEW® Apixaban Cont High



## Associated products

TECHNOVIEW® Apixaban Cal Set

TECHNOVIEW® Apixaban Cont Low

## Informations

Apixaban is a potent, reversible, direct and highly selective inhibitor of the active site of FXa. It does not require antithrombin to exert its antithrombotic activity.

Reference	Presentation	Format
4-5090270	Vial	5 x 1.0 mL

**High control plasmas for the apixaban assay.**

TECHNOVIEW® Apixaban Control High quality control plasmas are titrated to approximately 300 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Apixaban plasmas are prepared from citrated plasmas supplemented with different concentrations of apixaban and calibrated by the HPLC / MS - MS method.



## ANTICOAGULANT MONITORING

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Lyophilized plasmas



## TECHNOVIEW® Apixaban Cont Low



## Associated products

TECHNOVIEW® Apixaban Cal Set

TECHNOVIEW® Apixaban Cont High

## Informations

Apixaban is a potent, reversible, direct and highly selective inhibitor of the active site of FXa. It does not require antithrombin to exert its antithrombotic activity.

Reference	Presentation	Format
4-5090271	Vial	5 x 1.0 mL

## Low control plasmas for the apixaban assay.

TECHNOVIEW® Apixaban Control Low quality control plasmas are titrated to approximately 120 ng / mL, optimized for anti-FXa methods.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

TECHNOVIEW® Apixaban plasmas are prepared from citrated plasmas supplemented with different concentrations of apixaban and calibrated by the HPLC / MS - MS method.



## LUPUS DIAGNOSTICS (LA)

## HPPNA

LUPUS ANTICOAGULANT HEXAGONAL PHASE

## CRYOcheck™ Hex LA™

Chronometric assay



## Associated products

CRYOcheck™ Lupus Negative Control

CRYOcheck™ Lupus Positive Control

CRYOcheck™ Weak Lupus Positive Control

Reference	Presentation	Format	Number of tests
HEXLA	Kit	2 x 1.5 mL	60
HEXLA-M	Kit	2 x 1.0 mL	40

**CRYOcheck™ Hex LA™ is a qualitative test kit to aid in the detection of lupus anticoagulant (LA) by the application of hexagonal phase phospholipids.**

CRYOcheck™ Hex LA™ is an integrated (screen and confirm) silica-based APTT assay. The presence of LA in a sample is confirmed by the correction of APTT clot time upon addition of a reaction mixture containing hexagonal phase phospholipid. By comparing clot times of patient plasma both in the presence and absence of hexagonal phase phospholipid, the presence of LA can be confirmed. It is marketed in frozen and fully automated.



## Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI).

The presence of LA is primarily detected using sensitive in vitro tests using phospholipids, such as APTT (Activated Partial Thromboplastin Time) or DRVVT.

They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal losses) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

## Components

- 2 vials x 1 or 1.5 mL LA Start
- 2 vials x 1 or 1.5 mL LA Correct
- 2 vials x 2 or 3 mL LA APTT

## Advantages

- Ready to use after thawing, saves time.
- Hex LA is compatible with many automated coagulation analyzers, providing a quick and easy detection method in a panel of tests.
- Protocols available on request.

## Characteristics

HEXLA : 60 Tests

HEXLA-M : 40 Tests

## LUPUS DIAGNOSTICS (LA)

## dPT

ANTICOAGULANT LUPUS DRVVT

Chronometric assay



## ACTICLOT® dPT™



## Informations

LA are heterogeneous autoantibodies of IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI). LA are characterized by their ability to prolong clotting time in in vitro tests such as lupus-specific TCA, Kaolin partial thromboplastin time, dRVVT, and diluted prothrombin time (dPT).

Reference	Presentation	Number of tests
11-824	Kit	240

**Diluted prothrombin time for the determination of the lupus anticoagulant (LA)**

The ACTICLOT® dPT™ kit is used for the identification of Lupus Anticoagulant in human plasma.

The test can be performed on all automatic or semi-automatic coagulation devices.

## Components

- 3 vials x LA buffer (40 tests/vial)
- 3 vials x phospholipids
- 6 vials x dPT activator, lyophilized (40 tests/vial)

## Advantages

- Screening and confirmation tests can be performed at the same time or separately.
- Adaptable to analyzers.

## Characteristics

ACTICLOT dPT is a coagulation test which allows detection of LA in plasma. The screening test (LA Buffer + dPT ACTivator) allows the detection of LA in the patient's plasma if the clotting time is prolonged.

The confirmation test (LA Phospholipid + dPT activator) allows confirmation of LA in the patient's plasma if the clotting time is significantly shortened compared to the time obtained in the screening.



## LUPUS DIAGNOSTICS (LA)

## PNP

ANTICOAGULANT LUPUS PNP

Chronometric assay



## CRYOcheck™ Platelet Lysate



## Associated products

CRYOcheck™ Hex LA™

CRYOcheck™ LA Check™

CRYOcheck™ LA Sure™

CRYOcheck™ Lupus Positive Control

CRYOcheck™ Pooled Normal Plasma

CRYOcheck™ Weak Lupus Positive Control

Reference

PNP-10

Presentation

Kit

Format

25 x 1.0 mL

**Platelet lysate recommended for LA platelet neutralization test to confirm the presence of lupus anticoagulant (LA).**

Perfectly clean human platelet lysate stripped of other contaminating cells and proteins and prepared from platelets from healthy donors.

The concentration of platelets is adjusted to be equivalent to 250,000 to 300,000 platelets /  $\mu\text{L}$ , lysed and then frozen.



## Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI).

The presence of LA is primarily detected using sensitive in vitro tests using phospholipids, such as TCA (Activated Partial Time) or DRVVT. They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal loss) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

## Components

- 25 cryotubes x 1 mL of frozen lysate

## Advantages

- No bovine additives
- No reconstitution error
- Ready to use in a few minutes after thawing (4 min at 37°C)
- Checked negative for all serology tests required by the FDA

## Characteristics

- Flash freezing under nitrogen
- Compact, color-coded cabinets for easier identification in freezers
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C
- Packaging in plastic cryotubes suitable for all STA-R type supports

## LUPUS DIAGNOSTICS (LA)

## POSITIVE CONTROL

MULTIPARAMETRIC CONTROLS (LA)

Chronometric assay



## CRYOcheck™ Lupus Positive Control



## Associated products

CRYOcheck™ Hex LA™

CRYOcheck™ LA Check™

CRYOcheck™ LA Sure™

CRYOcheck™ Lupus Negative Control

CRYOcheck™ Platelet Lysate

CRYOcheck™ Weak Lupus Positive Control

Reference	Presentation	Format
CCLP-05	Kit	25 x 0.5 mL
CCLP-10	Kit	25 x 1.0 mL

## Strong positive plasma for lupus anticoagulant (LA) assays.

CRYOcheck™ Lupus Positive Control plasma is prepared from plasmas of patients with anticoagulant lupus. It is therefore recommended as a strong positive control for LA detection tests.



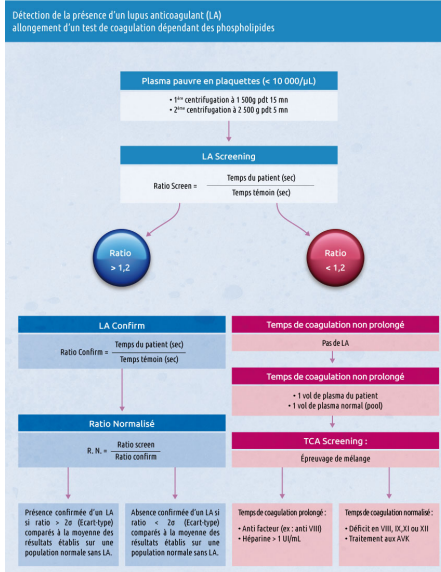
## Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI).

The presence of LA is primarily detected using sensitive in vitro tests using phospholipids, such as TCA (Activated Partial Time) or DRVVT. They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal losses) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

## Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma



## Advantages

Easily adaptable, the reagent is designed for use on most hemostasis analyzers.

## Characteristics

Each batch is supplied with a certificate of analysis showing the following results :

- TCA (sensitive lupus)
- TCA (1: 1 Pool mix)
- TCA on silica (SCT)
- Kaolin Clotting Time
- DRVVT report
- LA hexagonal phase
- PNP (platelet neutralization) IgG / IgA / IgM for :

Anti-cardiolipin  
Anti- $\beta$ -2-glycoprotein 1  
Anti-phosphatidylserine

Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

# LUPUS DIAGNOSTICS (LA)

dRVVT

ANTICOAGULANT LUPUS DRVVT

## CRYOcheck™ LA Check™

Chronometric assay



### Associated products

- CRYOcheck™ Hex LA™
- CRYOcheck™ LA Sure™
- CRYOcheck™ Lupus Negative Control
- CRYOcheck™ Lupus Positive Control
- CRYOcheck™ Platelet Lysate
- CRYOcheck™ Pooled Normal Plasma
- CRYOcheck™ Weak Lupus Positive Control

Reference	Presentation	Format	Number of tests
CHK-10	Kit	25 x 1.0 mL	300

### LA screening reagent based on diluted Russell's Viper Venom Time (dRVVT).

The CRYOcheck™ LA Check™ Kit (dRVVT Screening Reagent) is a highly sensitive reagent that detects samples with LA.



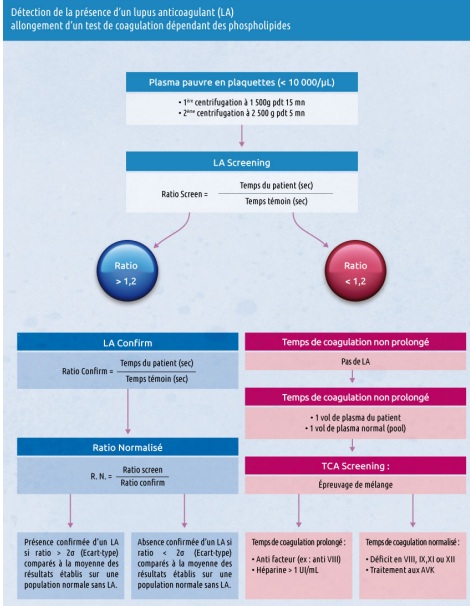
### Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as β2-glycoprotein I (β2-GPI).

The presence of LA is primarily detected using sensitive in vitro tests using phospholipids, such as TCA (Activated Partial Time) or dRVVT. They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal losses) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

### Components

- 25 cryotubes x 1 mL of frozen reagent



### Advantages

- Ready to use
- Stable
- Reserved lots
- CE adaptation on many analyzers on the market
- Technical validation file

### Characteristics

- Stability of 48 hours once the reagent is thawed and stored at 2-8 °C in its original bottle
- Protocols are available on request
- Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C
- Thawed reagent can only be refrozen once

The CRYOcheck™ LA Check™ Kit is a test composed of Russel viper venom and phospholipids that directly activates FX into FXa and bypasses the intrinsic and extrinsic pathway at the FX level. For this reason, dRVV-based tests are not affected by low levels, deficiencies, or the presence of anti-factor antibodies for factors upstream of FX.



# LUPUS DIAGNOSTICS (LA)

## NEGATIVE CONTROL

MULTIPARAMETRIC CONTROLS (LA)

Chronometric assay



# CRYOcheck™ Lupus Negative Control



### Associated products

CRYOcheck™ Hex LA™

CRYOcheck™ LA Check™

CRYOcheck™ LA Sure™

CRYOcheck™ Lupus Positive Control

CRYOcheck™ Platelet Lysate

CRYOcheck™ Weak Lupus Positive Control

Reference	Presentation	Format
CCLN-05	Kit	25 x 0.5 mL
CCLN-10	Kit	25 x 1.0 mL

### Plasma negative for lupus anticoagulant (LA) assays.

CRYOcheck™ Lupus Negative Lupus Negative Quality Control Plasma is prepared from plasmas of healthy patients without anticoagulant lupus.

Recommended as a negative control for lupus anticoagulant testing.



### Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI).

The presence of LA is primarily detected using sensitive in vitro assays using phospholipids, such as TCA (Activated cephalin) or DRVVT. They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal losses) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

### Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

### Advantages

- Easily adaptable, the reagent is designed for use on most hemostasis analyzers.  
- Ready to use.

### Characteristics

Each batch is supplied with a certificate of analysis showing the following results :

- TCA (sensitive lupus)
- TCA (1 : 1 Pool mix)
- TCA on silica (SCT)
- Kaolin Clotting Time
- DRVVT report
- LA hexagonal phase
- PNP (platelet neutralization) IgG / IgA / IgM for :

Anti-cardiolipin  
Anti- $\beta$ -2-glycoprotein 1  
Anti-phosphatidylserine

Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C

## LUPUS DIAGNOSTICS (LA)

## WEAK POSITIVE CONTROL

MULTIPARAMETRIC CONTROLS (LA)

Chronometric assay



## CRYOcheck™ Weak Lupus Positive Control



## Associated products

CRYOcheck™ Hex LA™

CRYOcheck™ LA Check™

CRYOcheck™ LA Sure™

CRYOcheck™ Lupus Negative Control

CRYOcheck™ Lupus Positive Control

CRYOcheck™ Platelet Lysate

Reference	Presentation	Format
CCWLP-05	Kit	25 x 0.5 mL
CCWLP-10	Kit	25 x 1.0 mL

## Low positive plasma for lupus anticoagulant (LA) assays.

CRYOcheck™ Weak Lupus Positive plasma is prepared from plasmas of patients with anticoagulant lupus.

It is therefore recommended as a weak positive control for LA detection tests.



## Informations

Lupus anticoagulants (LA) are heterogeneous autoantibodies of the IgG and IgM type directly directed against a variety of anionic phospholipids such as cardiolipin, phosphatidylserine or phosphatidylinositol or against proteins having the capacity to bind to phospholipids such as  $\beta$ 2-glycoprotein I ( $\beta$ 2-GPI).

The presence of LA is primarily detected using sensitive in vitro tests using phospholipids, such as TCA (Activated Partial Time) or DRVVT. They have the in vitro capacity to prolong phospholipid-dependent clotting times but are most often associated with thrombotic complications in vivo (venous or arterial thrombosis, thrombocytopenia and fetal losses) and do not predispose to a risk of bleeding. DRVVT is routinely used in screening for LA. It is considered specific and robust.

## Components

- 25 cryotubes x 0.5 mL or 1 mL of frozen plasma

## Advantages

Easily adaptable, the reagent is designed for use on most hemostasis analyzers.

## Characteristics

Each batch is supplied with a certificate of analysis showing the following results :

- TCA (sensitive lupus)
- TCA (1 : 1 Pool mix)
- TCA on silica (SCT)
- Kaolin Clotting Time
- DRVVT report
- LA hexagonal phase PNP (platelet neutralization) IgG / IgA / IgM for :

Anti-cardiolipin  
Anti- $\beta$ -2-glycoprotein 1  
Anti-phosphatidylserine

Expiration date of 3 years from the date of manufacture with storage between -40 °C and -80 °C

## D-DIMERS

## ELISA

REAGENT KITS

Immuno-Latex assays



## ActiScreen™XL-FDP



## Informations

D-dimer is a degradation product of crosslinked fibrin (XL-FDP) by plasmin, the main clot lysis enzyme. These are small fragments of reticulated fibrin circulating in the blood, a marker of fibrinolysis.

Measuring the level of D-dimer in a patient is useful in indicating the presence of a blood clot.

Therefore, levels below predetermined thresholds can be used to rule out conditions such as deep vein thrombosis (DVT), pulmonary embolism (PE), and stroke. A D-dimer level can be used to help diagnose disseminated intravascular coagulation (DIC) and to monitor the effectiveness of treatment for DIC.

Reference	Presentation	Number of tests
11-800DB	Kit	60

**ACTISCREEN™ XL-FDP is an immunoagglutination test for the rapid qualitative or semi-quantitative evaluation of crosslinked fibrin degradation product derivatives (XL-FDP) circulating in human plasma.**

## Components

- 1 vial x immunoagglutination reagent, 2.0 ml
- 1 vial x positive control, 0.6 ml
- 1 vial x negative control, 0.6 ml
- 1 vial x buffer 20 mL
- 10 test cards (8 tests per card)
- 1 packet x mixing sticks (60)

## Advantages

ActiScreen™ XL-FDP uses latex beads coupled to the highly specific DD3B6 / 22 monoclonal antibody. XL-FDP present in plasma binds to the antibody coated latex beads resulting in clumping, visible on the map test, when the XL-FDP concentration is greater than the lower limit of detection of the test.



## D-DIMERS

## ELISA

REAGENT KITS

Immuno-Latex assays



## TECHNOLEIA® D-Dimer LATEX KIT



## Associated products

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOLEIA® D-Dimer Control Low

TECHNOZYM® D-DIMER ELISA Kit

## Informations

D-Dimers are fragments resulting from the degradation of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of coagulation and formation of a clot, but can sharply increase in cases of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

Reference	Presentation	Number of tests
4-4847200	Kit	1 x 150
4-4847210	Kit	1 x 50

## Kit for the quantitative determination of D-Dimers by immuno-latex.

This immunoassay uses latex particles coupled to an anti-D-Dimer monoclonal antibody to allow very sensitive quantitative measurement of D-Dimers. Measuring range from 0 to 3000 ng / mL.

## Components

- 4-4847200 :
- latex reagent 1 x 12 mL
  - 1 x 21 mL reaction buffer
  - D-Dimer calibrator 0 ng / mL 2 x 1 mL
  - D-Dimer calibrator ≈ 3000 ng / mL 2 x 1 mL
  - 0.9% saline solution 1 x 8 mL
- 4-4847210 :
- latex reagent 1 x 4 mL
  - 1 x 7 mL reaction buffer
  - D-Dimer 0 ng / mL 1 x 2 mL calibrator
  - D-Dimer calibrator ≈ 3000 ng / mL 1 x 2 mL
  - 0.9% saline solution 1 x 8 mL

## Characteristics

Absorbance (turbidimetry) is directly proportional to the concentration of the antigen.

The probability of no thrombosis is defined if the concentration <135 ng / mL. Linearity: 101 - 3250 µg / L (activity)

Plasmas with values > 3000 ng / mL must be diluted in saline solution. (Specialized hemostasis)





## D-DIMERS

## ELISA

CONTROLS

Immuno-Latex assays



## TECHNOLEIA® D-Dimer Control High



## Associated products

TECHNOLEIA® D-Dimer LATEX KIT

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control Low

TECHNOZYM® D-DIMER ELISA Kit

Reference

4-4847230

Presentation

Vial

Format

5 x 1.0 mL

## High control plasmas D-Dimers

2000 ng / mL control plasmas used for the Technoleia® D-Dimer Latex kit assay kit.



## Informations

D-Dimers are fragments resulting from the destruction of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of coagulation and formation of a clot, but can sharply increase in cases of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

The Technoleia® D-Dimer latex kit test comprises an anti-D-Dimer monoclonal antibody coupled to the latex microparticles and forms a high molecular weight complex with the D-Dimer in the sample.

This results in a photometrically detectable change in turbidimetry of the sample which is directly proportional to the concentration of antigen within the sample. Controls should be treated the same as patient plasmas.

The remaining calibrators and controls can be aliquoted and frozen.  
Stability 1 month at -20 °C



## D-DIMERS

## ELISA

CONTROLS

Immuno-Latex assays



## TECHNOLEIA® D-Dimer Control Low



## Associated products

TECHNOLEIA® D-Dimer LATEX KIT

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOZYM® D-DIMER ELISA Kit

Reference

4-4847232

Presentation

Vial

Format

5 x 1.0 mL

## Low D-Dimer control plasmas

300 ng / mL control plasmas used for the Technoleia® D-Dimer Latex kit assay kit.



## Informations

D-Dimers are fragments resulting from the destruction of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of the coagulation and formation of a clot, but can strongly increase in the event of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

The Technoleia® D-Dimer test comprises an anti-D-Dimer monoclonal antibody coupled to the latex microparticles and forms a high molecular weight complex with the D-Dimer in the sample. This results in a photometrically detectable change in turbidimetry of the sample which is directly proportional to the concentration of antigens within the sample.

Controls should be treated the same as patient plasmas.

The remaining calibrators and controls can be aliquoted and frozen.

Stability 1 month at -20 °C



## D-DIMERS

## ELISA

CALIBRATORS

Immuno-Latex assays



# TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL



## Associated products

TECHNOLEIA® D-Dimer LATEX KIT

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOLEIA® D-Dimer Control Low

TECHNOZYM® D-DIMER ELISA Kit

## Informations

D-Dimers are fragments resulting from the destruction of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of the coagulation and formation of a clot, but can strongly increase in the event of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

Reference	Presentation	Format
4-4847234	Vial	2 x 1.0 mL

## High D-Dimer calibration plasmas

≈ 3000 ng / mL calibration plasmas used for the Technoleia® D-Dimer Latex kit assay kit.

## Components

- 2 vials x 1 mL lyophilized plasma

## Characteristics

The Technoleia D-Dimer test comprises an anti-D-Dimer monoclonal antibody coupled to the latex microparticles and forms a high molecular weight complex with the D-Dimer in the sample.

This results in a photometrically detectable change in turbidimetry of the sample which is directly proportional to the concentration of antigens within the sample. This calibrator is used to construct the reference curve.

The remaining calibrators and controls can be aliquoted and frozen.  
Stability 1 month at -20 °C



## D-DIMERS

## ELISA

CALIBRATORS

Immuno-Latex assays



# TECHNOLEIA® D-Dimer Calibrator 0 ng/mL



## Associated products

TECHNOLEIA® D-Dimer LATEX KIT

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOLEIA® D-Dimer Control Low

TECHNOZYM® D-DIMER ELISA Kit

Reference

4-4847236

Presentation

Vial

Format

2 x 1.0 mL

## Low D-Dimer calibration plasmas

0 ng / mL calibration plasmas used for the Technoleia® D-Dimer assay kit.



## Informations

D-Dimers are fragments resulting from the destruction of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of coagulation and formation of a clot, but can sharply increase in cases of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

## Components

- 2 vials x 1 mL lyophilized plasma

## Characteristics

The Technoleia® D-Dimer latex kit test comprises an anti-D-Dimer monoclonal antibody coupled to the latex microparticles and forms a high molecular weight complex with the D-Dimers of the sample.

This results in a photometrically detectable change in turbidimetry of the sample which is directly proportional to the concentration of antigens within the sample.

This calibrator is used to construct the reference curve.

The remaining calibrators and controls can be aliquoted and frozen. Stability 1 month at -20 °C.



## D-DIMERS

## LATEX

REAGENT KITS

Immuno-Latex assays



## TECHNOLEIA® D-Dimer LATEX KIT



## Associated products

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOLEIA® D-Dimer Control Low

TECHNOZYM® D-DIMER ELISA Kit

## Informations

D-Dimers are fragments resulting from the degradation of fibrin during fibrinolysis. A low level of D-Dimer is normal and indicates that there has been activation of coagulation and formation of a clot, but can sharply increase in cases of venous thrombosis, DIC (disseminated intravascular coagulation) or pulmonary embolism.

Reference	Presentation	Number of tests
4-4847200	Kit	1 x 150
4-4847210	Kit	1 x 50

## Kit for the quantitative determination of D-Dimers by immuno-latex.

This immunoassay uses latex particles coupled to an anti-D-Dimer monoclonal antibody to allow very sensitive quantitative measurement of D-Dimers. Measuring range from 0 to 3000 ng / mL.

## Components

- 4-4847200 :
- latex reagent 1 x 12 mL
  - 1 x 21 mL reaction buffer
  - D-Dimer calibrator 0 ng / mL 2 x 1 mL
  - D-Dimer calibrator ≈ 3000 ng / mL 2 x 1 mL
  - 0.9% saline solution 1 x 8 mL
- 4-4847210 :
- latex reagent 1 x 4 mL
  - 1 x 7 mL reaction buffer
  - D-Dimer 0 ng / mL 1 x 2 mL calibrator
  - D-Dimer calibrator ≈ 3000 ng / mL 1 x 2 mL
  - 0.9% saline solution 1 x 8 mL

## Characteristics

Absorbance (turbidimetry) is directly proportional to the concentration of the antigen.

The probability of no thrombosis is defined if the concentration <135 ng / mL. Linearity: 101 - 3250 µg / L (activity)

Plasmas with values > 3000 ng / mL must be diluted in saline solution. (Specialized hemostasis)



# FACTOR ASSAYS

## CHROMOGENIC ASSAYS

### PROTHROMBIN

COLORIMETRIC ASSAYS

## Rox Factor Prothrombin

Colorimetric assay



### Auxiliary reagents

Tris BSA

### Informations

Factor II (FII) is a glycoprotein synthesized by the liver, zymogen of a serine protease. It is a vitamin K-dependent clotting factor. Its half-life is 50 to 120 hours.

FII is activated by the prothrombinase thrombin complex which plays a central role in the coagulation process.

It will transform fibrinogen into fibrin, amplify its own formation and activate the protein C, TAFI and platelet systems.

There are constitutional deficits in FII which are very rare and acquired deficits which can be observed during anti-vitamin K treatment or vitamin K deficiency, CIVD, anti-FII autoantibodies.

Reference	Presentation	Number of tests
5-200040	Kit	4 x 30

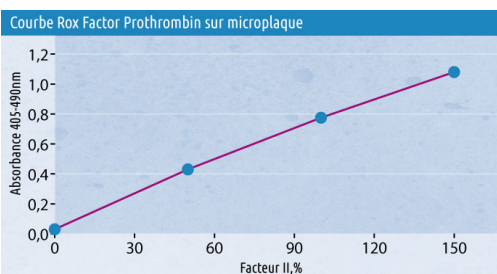
**Enzymatic assay kit for human prothrombin in human plasma (on citrate or EDTA) and in concentrates containing FII by colorimetric assay.**

### Components

- 4 vials x activator reagent (human FXa, bovine FVa, CaCl<sub>2</sub>, phospholipids) (3 mL)
- 1 vial x chromogenic substrate (6 mL)
- 1 vial x dilution buffer (20 mL)

### Advantages

- Excellent sensitivity around 0.25 mIU / mL unaffected by hemoglobin, bilirubin, triglycerides / heparins (UFH & LMWH)
- Based on prothrombinase complex to reflect biological activity
- Significant dilution of the sample which limits the generation of thrombin
- Very robust dosage because complete activation of prothrombin
- The biologically inactive prothrombin precursor (DCP) is not activated in this method.



### Characteristics

FII insufficiency as well as replacement therapy for FII can be monitored. (Specialized hemostasis)  
The functional activity of FII is determined by the enzymatic method of chromogenic prothrombinase in which human FII is activated to thrombin (IIa) by FXa in the presence of bovine FV, phospholipids and calcium ions.  
The amount of FIIa thus generated is determined by the hydrolysis of a chromogenic substrate of FIIa.  
The FII activity of the sample is determined against a concentrated or plasma standard and the result is expressed in International Units (IU).

## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR VIII

## COLORIMETRIC ASSAYS

## TECHNOCHROM® FVIII:C

Colorimetric assay



## Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

## Informations

Factor VIII is a glycoprotein mainly synthesized by the liver. It circulates in the plasma as bound to vWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa.

A patient who is deficient in FVIII has hemophilia A.

Reference	Presentation	Number of tests
4-5344101	Kit	2 x 50

## Colorimetric assay kit for Factor VIII in hemostasis.

The TECHNOCHROM® FVIII: C kit contains reagents for the colorimetric determination of the activity of FVIII in plasma and in plasma derivatives.



## Components

- 2 vials of FXa-1 + aNAPAP substrate (2 mL)
- 2 vials x reagent A (Phospholipid, Albumin) (2 mL)
- 2 vials x reagent B (FIXaβ, FX, Ca ++, Albumin, Thrombin) (2 mL)
- 1 bottle x ref. Stand. FVIII 1 (≈ 130%) (1 mL)
- 1 bottle x ref. Stand. FVIII 2 (≈ 70%) (1 mL)
- 1 bottle x ref. Stand. FVIII 3 (≈ 10%) (1 mL)
- 1 bottle x ref. Stand. FVIII 4 (<0.5%) (1 mL)
- 3 vials x FVIII dilution buffer (30 mL)
- 2 vials x FVIII reaction buffer (8 mL)

## Advantages

- 24 hour stability of reagents on analyzers
- Reagents refreezable 14 days at -20 ° C
- Insensitivity of TECHNOCHROM FVIII: C reagent to Emicizumab

## Characteristics

FVIII insufficiency as well as FVIII replacement therapy can be monitored. (Specialized hemostasis)

- Linearity: 1 - 144 (activity%).
- Detection limit: 0% (activity%)
- 5 minutes incubation and 3 minutes reading
- End point or kinetic

## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR VIII

## COLORIMETRIC ASSAYS

## Rox Factor VIII

Colorimetric assay



## Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

## Auxiliary reagents

Tris BSA

## Informations

Factor VIII is a glycoprotein mainly synthesized by the liver.

It circulates in the plasma as bound to vWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa.

A patient who is deficient in FVIII has hemophilia A.

Reference	Presentation	Number of tests
5-800070	Kit	2 x 100

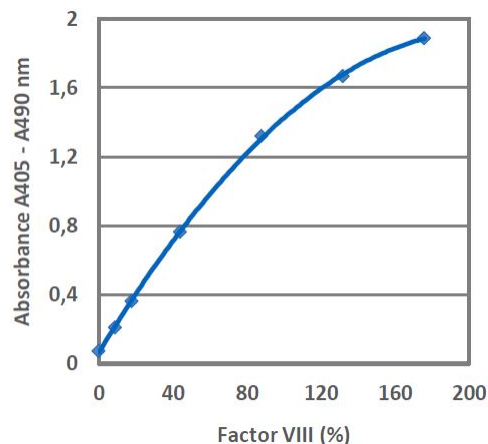
## Factor VIII colorimetric assay kit in human Factor VIII concentrates.

This kit for research use must not be used for the diagnosis or monitoring of patient treatment.



## Components

- 2 vials of reagent 1 (lyophilisate of bovine FX, and fibrin polymerization inhibitor)
- 2 vials of reagent 2 (freeze-dried human FIXa and IIa, calcium chloride and phospholipids)
- 1 vial of FXa chromogenic substrate (6 mL)
- 1 vial of Tris-BSA dilution buffer (20 mL)



## Method / Application

In the presence of Ca<sup>2+</sup> and phospholipids, FX is activated to FXa by FIXa. This reaction is strongly stimulated by FVIII after activation to FVIIIa by thrombin.

Using optimal concentrations of Ca<sup>2+</sup>, phospholipids, and excess FIXa, FX, and thrombin, the rate of FX activation is directly related to the amount of FVIII in the sample.

FXa hydrolyzes the chromogenic substrate, thus releasing the pNA chromophore group. The intensity of the color is proportional to the FVIII activity in the sample.

## Characteristics

- Linearity : 0 - 2 IU / mL (0-200%)
- Detection limit 0.003 IU / mL (0.3%)
- FVIII Excellent discrimination of FVIII activity
- Factor VIII deficient plasma not needed
- Reagent in accordance with the European Pharmacopoeia for the determination of FVIII
- Very stable on analyzers.



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR VIII

## CALIBRATORS

## EMICIZUMAB Calibrator

Colorimetric assay



## Associated products

EMICIZUMAB Controls

## Informations

Emicizumab, a drug intended for the prophylactic treatment of patients with hemophilia A, is a bispecific antibody that bridges activated Factor IX (FIXa) and Factor X (FX), there by restoring FVIII function, necessary for normal hemostasis.

The Emicizumab Calibrator can be used to determine the active amount of Emicizumab by measuring FVIII activity in a one-step chromometric assay with a hemostasis analyzer in citrated human plasma.

Reference	Presentation	Format
6-151-201	Vial	5 x 1 mL

## Calibration Plasma for EMICIZUMAB.

The Emicizumab Calibrator is a plasma designed for the calibration of Factor VIII (FVIII) when determining activity by the one-step chromometric methods.

## Components

- 5 vials of 1 mL, lyophilized (citrated plasma immunodepleted in FVIII with 100µg / mL Emicizumab)

## Characteristics

The calibrator is used to determine the amount of active Emicizumab in the plasma based on the measurement of the activated partial thromboplastin time.

After dilution of the calibrator, plasma deficient in FVIII is added as well as TCA reagent. Coagulation is initiated by adding CaCl<sub>2</sub>. The degree of TCA correction is correlated with the activity of Emicizumab, the concentration of which in µg / mL is determined using a calibration curve.



# FACTOR ASSAYS

## CHROMOGENIC ASSAYS

### FACTOR VIII

CONTROLS

## EMICIZUMAB Controls

Colorimetric assay



### Associated products

EMICIZUMAB Calibrator

Reference	Presentation	Format
6-152-401	Vial	2 x 5 x 1 mL

### Control plasma levels 1 & 2 for EMICIZUMAB

Emicizumab controls are level 1 & 2 controls intended to validate the calibration curve of FVIII activity by Emicizumab determined by an activated partial thromboplastin time.

### Informations

Emicizumab, a drug intended for the prophylactic treatment of patients with hemophilia A, is a bispecific antibody that bridges activated Factor IX (FIXa) and Factor X (FX), thereby restoring FVIII function. missing, necessary for normal hemostasis.

### Components

- Level 1: 5 vials x 1.0 mL
- Level 2: 5 vials x 1.0 mL

### Characteristics

Emicizumab levels 1 and 2 controls are used in the same way as plasmas from citrated patients. Emicizumab controls are prepared from citrated plasma immunodepleted in FVIII to which Emicizumab has been added to obtain a final concentration of 25 µg / mL (level 1) and 75 µg / mL (level 2).



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR VIII

## COLORIMETRIC ASSAYS

## Colorimetric assay



## CRYOcheck™ Chromogenic Factor VIII



## Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

## Informations

Factor VIII is a glycoprotein mainly synthesized by the liver. It circulates in the plasma as bound to vWF which protects it from rapid proteolytic degradation.

It is activated by FXa or thrombin in FVIIIa which will complex with FIXa in the presence of phospholipids to activate FX in FXa.

A patient who is deficient in FVIII has hemophilia A.

Reference	Presentation	Number of tests
CCCF08	Kit	4 x 20

**CRYOcheck™ Chromogenic Factor VIII is a chromogenic assay used for the colorimetric quantitative determination of Factor VIII activity in citrated human plasma.**



## Components

- 4 vials of reagent 1 (bovine FX + fibrin inhibitor) (1.25 mL)
- 4 vials of reagent 2 (human FIIa, human FIXa, Ca ++ , phospholipids) (1.25 mL)
- 4 vials of reagent 3 (FXa substrate + thrombin inhibitor) (1.25 mL)
- 4 vials of Tris-BSA Dilution Buffer (7 mL)

## Characteristics

CRYOcheck™ Chromogenic Factor VIII is used to identify FVIII deficiency and helps in the management of hemophilia A in people 2 years of age and older.

- Linearity: 0-200%
- Detection limit: 0.5% (activity%)
- Accuracy <4%
- 24 hours stability of reagents on analyzers
- Reagents refreezable 30 days at -70 ° C



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR IX

## COLORIMETRIC ASSAYS

## Rox Factor IX

Colorimetric assay



## Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

Very Low IX Control Plasma

## Auxiliary reagents

Tris BSA

## Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver.

The FIX can be activated in FIX in FIXa by the FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Number of tests
5-900020	Kit	2 x 50

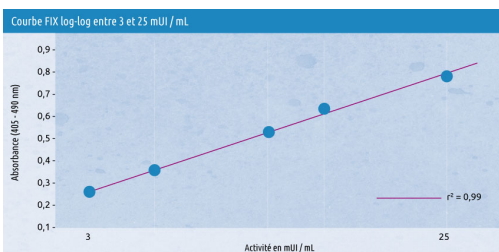
## Human Factor IX enzymatic assay kit.

The Rox Factor IX kit contains reagents for the colorimetric determination of Factor IX activity in plasma and in plasma derivatives.

Dilution buffer : additional bottles can be ordered under reference 5-9050, specifying the batch number of the box within the limit of available stocks.

## Components

- 2 vials x reagent A (human FVIII and FX, and bovine FV, lyophilized fibrin polymerization inhibitor)
- 2 vials x reagent B (lyophilized human FXIa and FII, CaCl<sub>2</sub> and phospholipids)
- 1 vial x FXa Chromogenic Substrate (6 mL)
- 1 vial x Tris BSA Dilution Buffer (20 mL)



## Method / Application

The ROX FACTOR IX is a chromogenic enzymatic assay kit for the determination of FIX in human FIX concentrates. FIX insufficiency as well as FIX replacement therapy can be monitored. (Specialized hemostasis)

This method is based on the activation of human FIX by human FXIa. The FIXa thus formed activates FX to FXa in the presence of FVIII, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.

## Characteristics

- Linearity : 0.005-2 IU / mL
- Two possible curves : linearity between 3 and 25 mIU/mL and between 50 and 500 mIU/mL
- Excellent sensitivity around 0.001 IU / mL with a signal > 30 mA at 405 nm
- No FIX-deficient plasma is used
- CE validated adaptation on STAR, CS5100, BCS XP and ACL Top



# FACTOR ASSAYS

## CHROMOGENIC ASSAYS

### FACTOR IX

COFFRETS DE DOSAGE COLORIMÉTRIQUE

Colorimetric assay



# CRYOcheck™ Chromogenic Factor IX



## Associated products

CRYOcheck™ Reference Control Normal

CRYOcheck™ Abnormal 1 Reference Control

CRYOcheck™ Abnormal 2 Reference Control

CRYOcheck™ Normal Reference Plasma

## Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver.

The FIX can be activated in FIX in FIXa by the FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Number of tests
CCCF09	Kit	96

**The CRYOcheck™ Chromogenic Factor IX is a chromogenic assay used for the quantitative colorimetric determination of Factor IX activity in citrated human plasma.**



## Components

- 4 vials of reagent 1 (human FVIII, human FX, bovine FV) (0.75 mL)
- 4 vials of reagent 2 (human FXIa, human FII) (2.3 mL)
- 4 vials of reagent 3 (FXa substrate) (1.0 mL)
- 4 vials of Tris-BSA dilution buffer (10.0 mL)

## Advantages

- Convenient frozen format - ready to use in minutes, with no risk of reconstitution error
- Thawed reagents stable for 48 hours in original vials when stored at 2-8°C
- Reagents can be re-frozen at -70°C for up to one month limiting reagent loss
- Excellent accuracy at low FIX activity

## Characteristics

The CRYOcheck™ Chromogenic Factor IX is used to identify FIX deficiency and helps in the management of hemophilia B in people aged 2 years and older

- Intended to be used on automated coagulation analyzers (protocols available on request)
- Linearity: 0-200%
- Stable 24h on analyzers
- Reagents refreezable 30 days at -70° C

## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR XIII

COLORIMETRIC ASSAYS

## TECHNOCHROM® FXIII

Colorimetric assay



## Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

## Informations

FXIII or fibrin stabilization factor is the zymogen of a transglutaminase. FXIII is activated by thrombin, it intervenes in the final phase of fibrinof formation to stabilize the fibrin clot. It is also involved in the phenomena of tissue repair and scarring by allowing the association of collagen and fibronectin.

There are constitutional deficits in FXIII which are autosomal recessive inheritance. The severe forms are associated with a hemorrhagic syndrome. Acquired FXIII deficiency due to anti-FXIII autoantibodies is also a very important cause of bleeding diathesis.

The consumption of FXIII in various diseases (malignant infections, Crohn's disease, Henoch-Schoenlein purpura, major surgery, ...) usually results from a moderate drop in the level of FXIII.

Reference	Presentation	Number of tests
4-5360010	Kit	3 x 20

**Assay kit for the detection of congenital or acquired FXIII deficiencies, abnormal levels with low activity or high FXIII levels.**

TECHNOCHROM® FXIII is a chromogenic enzymatic assay kit for determining the activity of FXIII.

## Components

- 3 vials x activator (3 mL)
- 3 bottles x detection reagent (3 mL)
- 3 vials x NADPH solution (3 mL)
- 3 vials x inhibitor reagent (1 mL)
- 1 vial x stabilization solution (6 mL)

## Method / Application

The determination of the activity of FXIII is based on the measurement of the ammonia released during the transglutaminase reaction. FXIII present in plasma is activated in the presence of thrombin and calcium.

The polymerization of fibrin is prevented and therefore the FXIIIa will catalyze the transformation of an amino substrate of glycine ethyl ester (GEE) into a glutamine residue and releasing an ammonium ion.

The amount of ammonium ion released is followed by a reaction dependent on NADPH, followed by the spectrophotometer with a decrease in absorbance at 340 nm

## Characteristics

The method is linear up to an FXIII activity of 300%. The detection limit is 0.6%.



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## TISSUE FACTOR

ELISA SETS

ELISA Assay



# IMUBIND® Tissue Factor ELISA



Reference	Presentation	Number of tests
11-845	Kit	12 x 8

## Informations

Tissue factor (TF) is a 45 kDa transmembrane cell surface glycoprotein known for its role in the initiation of coagulation. It functions as a receptor and cofactor for FVII and FVIIa. TF is released into the bloodstream after disruption of the endothelium.

Contact between TF and blood is sufficient to initiate the extrinsic pathway of coagulation. In vitro studies reveal that once TF is complex with FVII, FVII is activated by FXa. FVIIa by itself possesses low proteolytic activity, only when bound to TF does it possess sufficient proteolytic activity to activate FIX and FX.

The TF / FVIIa complex effectively activates both FX and FIX, thereby initiating intrinsic and extrinsic coagulation pathways.

The extrinsic pathway is rapidly attenuated by the tissue factor pathway inhibitor (TFPI). TFPI is the only effective inhibitor of the TF / FVIIa complex.

**The IMUBIND® Tissue Factor ELISA is intended for the measurement of human tissue factor (TF, thromboplastin) in human plasma, tumor tissue extracts and cell culture supernatants (eg, monocytes stimulated by LPS lipopolysaccharide).**

## Components

- 96-wells plate coated with anti-TF IgG
- 6 vials x freeze-dried TF (0-1000 pg / mL) standard
- 2 vials x biotinylated detection antibody, lyophilized
- 1 vial x enzyme conjugate, streptavidin-HRP, 60 µL
- 1 vial x enzyme conjugate diluent, 20 mL lyophilized
- 1 vial x substrate, TMB, 11 mL
- 1 packet x wash buffer, PBS with 0.1% Triton X-100, pH 7.4

## Characteristics

Stability 1 month after opening.

This test measures TF in plasma, tissue extracts, cell culture supernatants Absorbance at 450nm Standards can be aliquoted and frozen Sensitivity between 0 to 1000pg / mL.



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## TAFI

ELISA SETS

ELISA Assay



## IMUCLONE™ Total TAFI ELISA



## Associated products

TAFI Immunodepleted Deficient Human Plasma

## Informations

TAFI, thrombin-activatable fibrinolytic inhibitor, (also known as carboxypeptidase U and plasma pro-carboxypeptidase B) is a 60kDa molecular weight glycoprotein (proenzyme form) found in human plasma that modulates fibrinolysis. This proenzyme is converted to an active form of molecular ratio 35kDa, TAFIa, after proteolytic cleavage by the thrombin / thrombomodulin complex.

TAFIa possesses carboxypeptidase activity with a preference for cleavage of lysine and arginine residues from the end of proteins. Modulation of fibrinolysis occurs when TAFIa cleaves the C-terminal arginine and lysine residues of partially degraded fibrin. Removal of arginine and lysine residues from fibrin inhibits the continued degradation of fibrin by tPA-activated plasmin. TAFI may play a central role in thrombosis and fibrinolysis due to its ability to delay fibrin clot lysis.

Reference	Presentation	Number of tests
11-873	Kit	12 x 8

The IMUCLONE™ Total TAFI ELISA is an in vitro test for the measurement of TAFI antigen in human plasma or in any fluid containing TAFI.

## Components

- 96-well microtest plate coated with human anti-TAFI antibody
- 2 vials x Sample Diluent-F, 50 mL
- 1 vial x conjugate diluent, 25 mL
- 3 vials x human anti-TAFI antibody immunoconjugate coupled to HRP, lyophilized
- 1 vial x washing solution, 20 x concentrate, 50 mL
- 1 vial x TMB substrate, ready to use, 25 mL
- 1 bottle x stop solution, 6 mL
- 3 vials x TAFI plasma calibrator, lyophilized
- 1 vial x TAFI Control I - High, lyophilized
- 1 vial x TAFI Control II - Low, lyophilized

## Method / Application

The TAFI contained in the samples is captured by the capture monoclonal antibody located at the bottom of the wells. After washing, the TAFI is revealed by an anti-human TAFI polyclonal antibody coupled to peroxidase. The TMB will thus react with the peroxidase to form a blue colored compound which will be stopped by the stop solution to give a yellow compound where the absorbance of the solution is measured at 50 nm. Absorbance is directly proportional to the amount of TAFI present in the sample.





# FACTOR ASSAYS

## CHROMOGENIC ASSAYS

### TAFI

REAGENT KITS

## Pefakit® TAFI



### Associated products

Pefakit® TAFI Controls and Calibration

IMUCLONE™ Total TAFI ELISA

### Informations

TAFI, thrombin-activatable fibrinolytic inhibitor, (also known as carboxypeptidase U and plasma pro-carboxypeptidase B) is a 60kDa molecular weight glycoprotein (proenzyme form) found in human plasma that modulates fibrinolysis.

This proenzyme is converted to an active form of molecular ratio 35kDa, TAFIa, after proteolytic cleavage by the thrombin / thrombomodulin complex. TAFIa possesses carboxypeptidase activity with a preference for cleavage of lysine and arginine residues from the end of proteins.

Reference	Presentation	Format
8-800186	Kit	2 x 4.0 mL

**Pefakit® TAFI is a plasma-based chromogenic test for the determination of TAFI activity.**

### Components

- 2 vials of lyophilized activator, to be reconstituted in 4.0 mL of demineralized water.
- 2 vials of lyophilized reagent, to be reconstituted in 4.0 mL of diluent.
- 2 vials of ready-to-use diluent for reconstitution of the reagent.

### Advantages

- Inserts and certificates of analysis provided.
- Safety data sheets (SDS) provided.

### Characteristics

Calibrator and control plasma delivered in a separate test kit (Pefakit® TAFI Calibrator and Controls, Code 8-800187).



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## TAFI

## CALIBRATORS

## Pefakit® TAFI Controls and Calibration



## Associated products

Pefakit® TAFI

IMUCLONE™ Total TAFI ELISA

## Informations

TAFI, thrombin-activatable fibrinolytic inhibitor, (also known as carboxypeptidase U and plasma pro-carboxypeptidase B) is a 60kDa molecular weight glycoprotein (proenzyme form) found in human plasma that modulates fibrinolysis. This proenzyme is converted to an active form of molecular ratio 35kDa, TAFIa, after proteolytic cleavage by the thrombin / thrombomodulin complex.

TAFIa possesses carboxypeptidase activity with a preference for cleavage of lysine and arginine residues from the end of proteins. Modulation of fibrinolysis occurs when TAFIa cleaves the C-terminal arginine and lysine residues of partially degraded fibrin. Removal of arginine and lysine residues from fibrin inhibits the continued degradation of fibrin by tPA-activated plasmin. TAFI may play a central role in thrombosis and fibrinolysis due to its ability to delay fibrin clot lysis.

Reference	Presentation	Format
8-800187	Kit	1 x 1.0 mL

## Pefakit® TAFI calibration and control plasma pool.

Calibrator and control plasmas are used for calibration and control of the plasma based chromogenic assay for determination of Thrombin Activatable Fibrinolysis Inhibitor (TAFI) enzyme activity with Pefakit® TAFI (Code 800186).

## Components

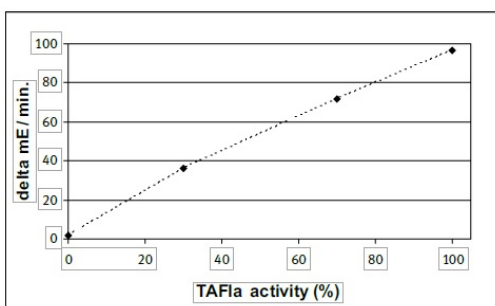
- 1 vial of human plasma for calibration
- 1 vial of TAFI Control 1
- 1 vial of TAFI Control 2

## Advantages

Inserts and certificates of analysis provided.  
Safety data sheets (SDS) provided.

## Characteristics

TAFIa activity (%) of undiluted calibrator, controls 1 and 2 is lot specific and indicated in each certificate.



## FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## TFPI

REAGENT KITS

Colorimetric assay



## Human TFPI Depleted Plasma



## Associated products

ACTICHROME® TFPI

## Informations

TFPI is an anticoagulant protein produced by the endothelial cell which is found on its surface.

Its role is to inhibit the early phases of coagulation by blocking the F<sub>T</sub>-F<sub>VI</sub>a complex as well as the FXa.

Reference	Presentation	Format
11-848DP	Vial	1 x 0.5 mg

**Lyophilized normal citrated human plasma immunodepleted of tissue factor pathway inhibitor (TFPI) via immunoaffinity chromatography, using a column of antibody specific for human TFPI immobilized to agarose beads.**

## Components

- Screw-capped glass vial containing the equivalent of 0.5 mg plasma.

## Advantages

The lyophilized presentation allows greater stability until the expiration date.

## Characteristics

Add 0.5 mL of filtered deionized/distilled water. The plasma contains 20 mM HEPES buffer. Store at +2°/+8°C. Reconstituted plasma should be held on melting ice for the duration of the testing. The material should be used within 4 hours of reconstitution.



## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR VIIa

ELISA SETS

ELISA Assay



## IMUBIND® Factor VIIa ELISA



## Informations

Factor VII (FVII) is a glycoprotein synthesized by the liver, vitamin k dependent. When tissue factor (TF) appears on the surface of damaged, abnormal or activated vascular endothelium, FVIIa associates with it, initiating the pathway extrinsic coagulation. The FT-FVIIa complex activates the FX in FXa and the FIX in FIXa.

**The IMUBIND® Factor VIIa ELISA is an enzyme-linked immunosorbent assay for the quantification of activated human Factor VII (FVIIa) in plasma as well as in cell culture supernatants.**

This ELISA detects FVIIa as well as FVIIa complexed with tissue factor (TF/FVIIa).

## Components

- 12 x 8-well breakable ELISA strips coated with anti-human FVII / FVIIa monoclonal antibody
- 2 vials of FVIIa standard, 200 ng / mL lyophilized
- 1 vial of FVII deficient plasma, 0.5 mL lyophilized
- 1 vial of reference plasma, 300 µL lyophilized
- 1 vial of FVIIa inhibitor, biotinylated, 200 µL freeze-dried concentrate
- 1 vial of enzyme conjugate, streptavidin-HRP, 120 µL
- 1 vial of TMB substrate, 11 mL
- 1 vial of stabilizer, 4.0 mL lyophilized
- 1 vial of test diluent, 22 mL lyophilized
- 1 packet of wash buffer, PBS with Tween 20 0.05%

## Method / Application

The IMUBIND FVIIa ELISA assay uses a biotinylated FVIIa enzyme inhibitor and anti-FVII / FVIIa monoclonal antibody as the capture antibody. Diluted plasma samples or supernatants containing FVIIa are incubated with the biotinylated inhibitor, which covalently binds to FVIIa but not FVII. The samples are added to the microwell coated with the capture monoclonal antibody. The FVIIa is detected thanks to the streptavidin-HRP which will bind the FVIIa complex captured at the bottom of the well by the monoclonal antibody and the biotinylated FVIIa inhibitor. The TMB will thus recognize the HRP giving a blue compound which will be stopped by adding sulfuric acid giving a yellow compound, measured at 450nm. The results will be compared with a known FVIIa standard curve.

## Characteristics

- Stability 1 month after opening
- Reaction time 120 minutes
- This test recognizes both native and recombinant human FVIIa and FVIIa/TF complexes
- FVII is not detected in the test
- FVII does not auto-activate in FVIIa during the execution of this test
- FVIIa in normal plasmas is approximately 5 ng/mL
- Sensitivity between 0.6 to 100 ng/mL

## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR IXa

## COLORIMETRIC ASSAYS

## Rox FIX-A

Colorimetric assay



## Associated products

Factor IXa Calibrator

Factor IXa Control

Tris BSA

## Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver. FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Number of tests
5-950030	Kit	2 x 50

**Enzymatic assay kit for human Factor IXa in human Factor IX concentrates.**

The Rox Factor IXa kit contains reagents for the colorimetric determination of the activity of FIXa in plasma and in plasma derivatives.

Dilution buffer : additional bottles can be ordered under reference 5-9550, specifying the batch number of the box within the limit of available stocks.

## Components

- 2 vials x reagent A (lyophilized human FVIII and FX)
- 2 vials x reagent B (lyophilized human thrombin, CaCl<sub>2</sub> and phospholipids)
- 1 vial x FXa Chromogenic Substrate (6 mL)
- 1 vial x FIXa dilution buffer (20 mL)

## Method / Application

The ROX FIX-A is a chromogenic enzymatic assay kit for the determination of very small amounts of FIXa in human FIX concentrates. The results are expressed in IU. The very low presence of FIXa can be measured. (Specialized hemostasis).

This method is based on the activation of FX by FIXa (considered a contaminant in FIX concentrate) in the presence of FVIII, thrombin, phospholipids and calcium ions.

The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.

## Characteristics

- Linearity between 0.02 and 0.8 mIU / mL
- Limit of quantification = 0.02 mIU FIXa / mIU FIX
- The sensitivity of 0.005% is much better than that of the NAPTT method
- Reagents stable 48 h at 2-8 °C
- Calibrator and control provided



## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR IXa

CONTROLS

## Factor IXa Control

Colorimetric assay



## Associated products

Rox FIX-A

Factor IXa Calibrator

## Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver.

FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Format
5-9588	Vial	10 x 2.0 mL

**Purified preparation of Factor IXa for the ROX FIX-A kit, titrated against the international standard WHO.**

Quality control plasma for the determination of FIXa in colorimetry.

## Components

- 10 vials x 2 mL lyophilized plasma

## Method / Application

The ROX FIX-A is a chromogenic enzymatic assay kit for the determination of very small amounts of FIXa in human FIX concentrates. The results are expressed in IU. The sensitivity of the assay is 0.1 mIU / mL. This method is based on the activation of FX by FIXa (considered a contaminant in FIX concentrate) in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.



## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR IXa

CALIBRATORS

## Factor IXa Calibrator

Colorimetric assay



## Associated products

Rox FIX-A

Factor IXa Control

## Informations

FIX is a vitamin K dependent glycoprotein synthesized by the liver. FIX can be activated to FIX in FIXa by FXIa or by FVIIa in the presence of phospholipids and calcium.

A person who is deficient in FIX has hemophilia B.

Reference	Presentation	Format
5-9599	Vial	10 x 2.0 mL

**Purified preparation of Factor IXa for the ROX FIX-A kit, calibrated against the international standard WHO.**

Calibration plasma for the determination of FIXa in colorimetry, it can be used directly without dilution after reconstitution.

## Components

- 10 vials x 2 mL lyophilized plasma

## Method / Application

The ROX FIX-A is a chromogenic enzymatic assay kit for the determination of very low amounts of FIXa in human FX concentrates. The results are expressed in IU. The sensitivity of the assay is 0.1 mIU / mL. This method is based on the activation of FX by FIXa (considered a contaminant in FIX concentrate) in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.



## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR XIa

## COLORIMETRIC ASSAYS

## Rox Factor XIa

Colorimetric assay



Reference	Presentation	Number of tests
5-110050	Kit	2 x 50

## Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic pathway of coagulation. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

**Human Factor XIa quantitative assay kit in enriched or highly concentrated preparations of human Factor XIa. Not validated for plasma assays.**

The ROX FACTOR XIa is a quantitative enzymatic and chromogenic assay kit for the determination of FXI activity in human FXI concentrates.

Dilution buffer : additional bottles can be ordered under reference 5-1150, specifying the batch number of the box within the limit of available stocks.



## Components

- 2 vials x reagent A (lyophilized human FIX and FVIII)
- 2 vials x reagent B (lyophilisate of human FX and bovine thrombin, CaCl<sub>2</sub> and phospholipids)
- 1 vial x FXa chromogenic substrate (6 mL)
- 1 vial x dilution buffer (20 mL)

## Method / Application

The FIXa formed activates FX to factor FXa in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa. The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm and is proportional to the concentration of FIXa in the reaction medium. The results are expressed in IU. The very low presence of FXIa can be measured. (Specialized hemostasis)

## Characteristics

- Excellent sensitivity around 1.2 mIU / mL
- FXIa No FXI-deficient plasma is used
- Can be used directly without dilution after reconstitution
- Sensitivity of approximately 0.03 mIU / mL



## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR XIa

CONTROLS

## Factor XIa Control

Colorimetric assay



## Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic coagulation pathway. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

Reference	Presentation	Format
5-1188	Vial	10 x 4.0 mL

**Purified preparation of Factor XIa for the ROX FXIa kit, titrated against the WHO international standard.**

Quality control plasma for the determination of FXIa in hemostasis.



## Components

- 10 vials of 4 mL of freeze-dried plasma

## Method / Application

The FIXa formed activates FX to FXa in the presence of FVIII, thrombin, phospholipids and calcium ions. The amount of FXa generated is determined by the hydrolysis of a chromogenic substrate of FXa.

The amount of para-nitroaniline released during this hydrolysis and measured at 405 nm is proportional to the concentration of FIXa in the reaction medium.

## Characteristics

Calibration of the human FXIa lyophilisate was carried out using the international standard NIBSC 11/236 used in the ROX Factor XIa kit. The ROX FACTOR XIa is a quantitative enzymatic and chromogenic assay kit for the determination of FXI activity in concentrates of human FXI.

## ACTIVATED FACTOR ASSAYS

## CHROMOGENIC ASSAYS

## FACTOR XIa

CALIBRATORS

## Factor XIa Calibrator

Colorimetric assay



## Informations

Factor XI (FXI) is a protein synthesized by the liver. It participates in the contact phase which initiates the intrinsic pathway of coagulation. It is activated by FXIIa to factor FXIa which will itself activate FIX in the presence of calcium ions.

Reference	Presentation	Format
5-1199	Vial	10 x 4.0 mL

**Purified preparation of factor XIa for the ROX FXIa kit, calibrated against the WHO international standard.**

Calibration plasma for the determination of FXIa in hemostasis.



## Components

- 10 vials x 4 mL lyophilized plasma

## Method / Application

The amount of FXa generated is determined by hydrolysis of a chromogenic substrate for FXa.

The quantity of para-nitroaniline released during this hydrolysis and measured at 405 nm and is proportional to the concentration of FIXa in the reaction medium.

## Characteristics

The activity is determined from a calibration with the 1st international standard for human FXIa a NIBSC 13/100 used in the ROX Factor XIa kit. The ROX FACTOR XIa is a quantitative enzymatic and chromogenic assay kit for the determination of FXI activity in concentrates of human FXI.

## ACTIVATED FACTOR ASSAYS

## ACTIVATION MARKERS

## THROMBIN

FLUORIMETRIC ELISA ASSAY SETS

Fluorometric assay



## OLIGOBIND® Thrombin Activity Assay



## Associated products

THROMBIN BLOOD COLLECTION TUBES

## Informations

The conversion of prothrombin to thrombin is a key event in thrombus formation. Thrombin is a serine protease that acts on a wide variety of substrates during the clotting process.

Thrombin generated *in vivo* can be assessed indirectly by measuring the fragment of prothrombin F1.2, an activating peptide generated during the conversion of prothrombin to thrombin, or thrombin-antithrombin complexes (TAT), formed during inactivation of thrombin by its major inhibitor present in plasma.

However, due to differential accumulation in the circulation, these parameters do not reflect the current state of functional active thrombin *in vivo*.

Reference	Presentation	Number of tests
26-ADG844	Kit	96

**OLIGOBIND® Thrombin activity assay is an enzymatic capture assay for the quantitative measurement of thrombin in stabilized plasma samples.**

## Components

- 12 breakable ELISA strips of 8 wells coated with Aptamers
- 1 bottle x 50 mL washing buffer concentrate
- 2 sets x 6 vials of 0.5 mL calibrators numbered 1 to 6
- 1 bottle x 140 µL fluorogenic substrate
- 1 bottle x 15 mL substrate buffer

## Characteristics

In combination with the thrombin blood collection tubes (product ref. 26-ADG844T25 and 26-ADG844T50) which ensure *ex vivo* stabilization of thrombin activity, the OLIGOBIND® Thrombin activity assay kit allows direct quantification of the level of thrombin.

- Functional active thrombin in blood plasma
- End point or kinetic measurement Low limit of quantification 0.35 mU / mL thrombin
- Specific for human thrombin
- Platelets may interfere with the test



## ACTIVATED FACTOR ASSAYS

## ACTIVATION MARKERS

## PROTEIN C

FLUORIMETRIC ELISA ASSAY SETS

Fluorometric assay



## OLIGOBIND® APC Activity Assay



## Associated products

APC BLOOD COLLECTION TUBES

## Informations

Une incapacité à générer des quantités suffisantes de protéine C activée (APC) est associée à un phénotype prothrombotique et hyperinflammatoire. La gravité des symptômes cliniques dépend de l'activité APC résiduelle.

Le phénotype prothrombotique est le symptôme principal dans les formes plus légères de déficit en APC, telles que le déficit en PC hétérozygote, alors que les formes plus graves de déficit en APC, telles que le déficit en PC homozygote, sont caractérisées par un phénotype thrombo-inflammatoire. Le dysfonctionnement acquis en APC est impliqué de manière critique dans la pathogenèse de plusieurs maladies thrombo-inflammatoires, y compris les septicémies sévères.

Reference	Presentation	Number of tests
26-ADG855	Kit	96

**OLIGOBIND® APC activity assay is an enzymatic capture assay for the quantitative measurement of activated protein C in stabilized plasma samples.**

## Components

- 12 breakable ELISA strips x 8 wells lined with aptamers
- 1 bottle x 50 mL washing buffer 10 x concentrate
- 1 vial x 2 mL sample dilution buffer
- 1 vial x 0.5 mL CaCl<sub>2</sub> solution
- 2 sets x 7 vials of 0.5 mL calibrators numbered 1 to 7
- 1 vial x 140 µL fluorogenic APC substrate
- 1 bottle x 15 mL substrate buffer

## Advantages

Du plasma est ajouté à des micropuits recouverts d'un aptamère ADN dirigé contre l'APC. Après une période d'incubation, l'APC présente dans l'échantillon se lie à l'apatamère fixé aux puits. Après un lavage, le substrat peptidique fluorogène pour l'APC est ajouté aux puits. La mesure du changement de fluorescence (360 [ex] / 460 [em] nm) et en extrapolant la valeur avec celles d'une courbe d'étalonnage détermine le niveau d'APC dans l'échantillon de plasma.

## Characteristics

En combinaison avec les tubes de collecte de sang APC (réf. 26-ADG855T25 et 26-ADG855T50) qui assurent la stabilisation de l'activité de l'APC ex vivo, le test d'activité OLIGOBIND® APC activity assay permet la quantification directe du taux de protéine C active dans le plasma à partir du sang périphérique.

# THROMBOPHILIA

## FACTOR V LEIDEN / APCR

CHRONOMETRIC DOSAGE SETS

Chronometric assay



### APC Resistance Kit



#### Associated products

APC Control Kit

#### Informations

Resistance to activated protein C is an anomaly described by Dahlbäck in 1993.

Bertina discovered in 1994 the presence of a mutation in the factor V (FV) gene.

This mutation leads to the replacement at position 506 of an arginine by a glutamine (Arg506Gln), which affects one of the sites of cleavage of FV by PCa. As a result, FV "resists" inactivation by PCa.

The mutated FV is referred to as FV Leiden. This factor V loses its function as a cofactor of the protein C system, that is to say of a system which inhibits coagulation; on the other hand, it retains its procoagulant properties. There are other cases of mutations related to the resistance of activated protein C.

Reference	Presentation	Number of tests
4-5344510	Kit	3 x 40

#### Determination of resistance to protein C activated by the coagulant method.

The APC Resistance Kit is a functional plasma coagulation test that differs from other functional tests for resistance to APC by acting specifically at the prothrombinase complex.

It is based on an FV-dependent prothrombin activator isolated from snake venom.

The strength and specificity of the test are improved by eliminating possible disturbances by factors upstream of the coagulation cascade and calcium independence.



#### Components

- 3 vials x 2mL R1: RVV-V (+ APC), lyophilized
- 3 vials x 2mL R2: RVV-V (- APC), lyophilized
- 3 vials x 4mL R3: prothrombin activator, lyophilized
- 3 vials x 2mL R4: plasma diluent, lyophilized
- 1 vial x 1mL FV-L negative control
- 1 vial x 1mL FV-L heterozygous control

#### Advantages

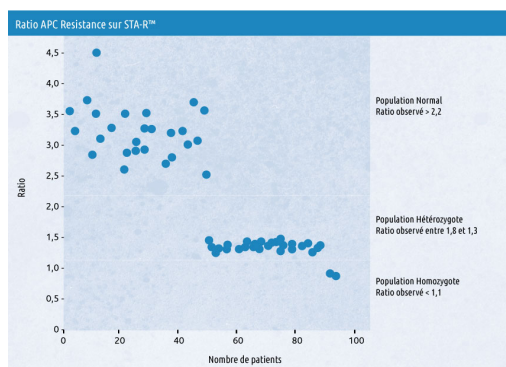
- Vials suitable for hemostasis analyzers
- Protocols are available on request
- Excellent stability on board hemostasis analyzers
- Excellent linearity over a large measurement area

#### Characteristics

- Designed for use on the majority of hemostasis analyzers.
- Minimum expiration date of 2 years after the date of manufacture.
- Specificity 100%
- Sensitivity 100%
- Clear discrimination between genotypes
- Specialized hemostasis

Not affected by :

- Lupus anticoagulants
- Protein C / protein S
- Antithrombin
- Fibrinogen and abnormal PT
- FVIII / FX / TFPI / D-Dimers
- Unfractionated heparins (UFH) and low molecular weight heparins up to 1.0 IU / mL



# THROMBOPHILIA

## FACTOR V LEIDEN / APCR

CONTROLS

Chronometric assay



### APC Control Kit



#### Associated products

APC Resistance Kit

#### Informations

The mutated FV is referred to as FV Leiden. This mutation leads to the replacement at position 506 of an arginine by a glutamine (Arg506Gln), which affects one of the sites of cleavage of FV by PCa. As a result, FV "resists" inactivation by PCa.

This factor V loses its function as a cofactor of the protein C system, that is to say of a system which inhibits coagulation; on the other hand, it retains its procoagulant properties.

There are other cases of mutations related to the resistance of activated protein C.

Reference	Presentation	Format
4-5344512	Kit	2 x 1.0 mL

#### Normal and heterozygous controls for the validation of the assay of resistance to protein C activated by the coagulant method in hemostasis.

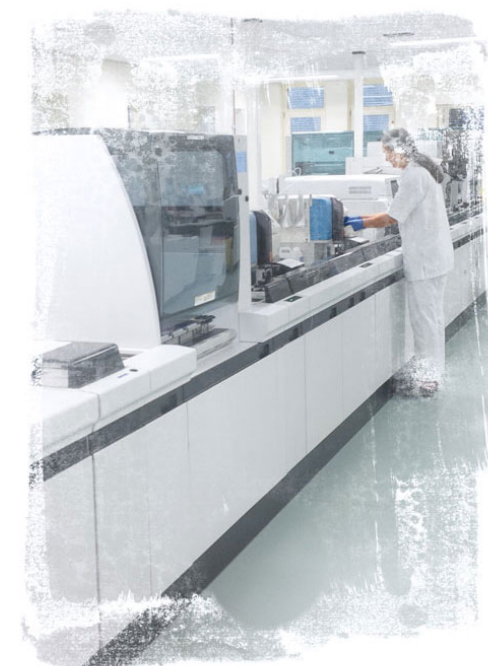
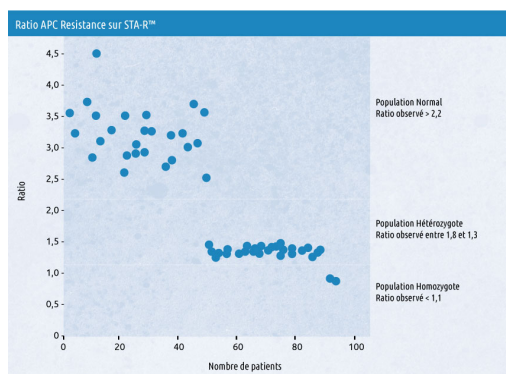
The APC CONTROL KIT contains quality control plasmas from donors with either a normal wild-type pattern or the heterozygous Factor V Leiden mutation genotype (FV: Q506). The genotype of each donor was checked and verified by PCR typing.

#### Components

- 1 vial x 1mL lyophilized negative control plasma
- 1 vial x 1mL of lyophilized heterozygous control plasma

#### Characteristics

- After reconstitution stability of 6 months at -20 °C.



# THROMBOPHILIA

## FACTOR V LEIDEN / APCR

CHRONOMETRIC DOSAGE SETS

### Pefakit® APC-R Factor V Leiden



#### Associated products

Pefakit® APC-R Factor V Leiden Controls

#### Informations

Resistance to activated protein C is an anomaly described by Dahlbäck in 1993. Bertina discovered in 1994 the presence of a mutation in the factor V (FV) gene. This mutation leads to the replacement at position 506 of an arginine by a glutamine (Arg506Gln), which affects one of the sites of cleavage of FV by PCa. As a result, FV "resists" inactivation by PCa. The mutated FV is referred to as FV Leiden. This factor V loses its function as a cofactor of the protein C system, that is to say of a system which inhibits coagulation; on the other hand, it retains its procoagulant properties. There are other cases of mutations related to the resistance of activated protein C.

Reference	Presentation	Format	Number of tests
8-502-01	Kit	3 x 2.0 mL	3 x 40

**Pefakit® APC-R Factor V Leiden is a functional coagulation test for the determination of resistance to activated protein C (APC-R) caused by the Factor V Leiden mutation.**

Test based on an FV-dependent prothrombin activator, isolated from snake venom.

#### Advantages

Any interference from UFH, LMWH or pentasaccharide in the blood sample is excluded by the addition of polybrene (heparin inhibitor) to reagents 1 and 2. The strength and specificity of the test are enhanced by the elimination of possible disturbances by factors upstream of the coagulation cascade and calcium independence. Results available on different types of analyzers.

#### Characteristics

Pefakit® APC-R Factor V Leiden is a functional plasma coagulation test which differs from other functional tests for resistance to APC by acting specifically at the prothrombinase complex level.



# THROMBOPHILIA

## FACTOR V LEIDEN / APCR

CONTROLS

### Pefakit® APC-R Factor V Leiden Controls



#### Associated products

Pefakit® APC-R Factor V Leiden

#### Informations

The mutated FV is referred to as FV Leiden. This mutation leads to the replacement at position 506 of an arginine by a glutamine (Arg506Gln), which affects one of the sites of cleavage of FV by PCa. As a result, FV "resists" inactivation by PCa. This factor V loses its function as a cofactor of the protein C system, that is to say of a system which inhibits coagulation; on the other hand, it retains its procoagulant properties. There are other cases of mutations related to the resistance of activated protein C.

Reference	Presentation	Format
8-502-21	Kit	2 x 3 x 1.0 mL

**Control plasmas used to confirm the Factor V Leiden mutation (FV: Q506) in tests to determine the functional phenotype of resistance to activated protein C.**

#### Components

- 3 vials of human plasma for negative control.
- 3 flasks of human plasmas for heterozygous control.

#### Advantages

Results available on different types of analyzers.

#### Characteristics

The controls are intended for use in conjunction with the Pefakit® APC-R Factor V Leiden (REF 502-01), a functional plasma test to determine resistance to activated protein C caused by the Factor V Leiden mutation (FV: Q506) or equivalent APC stress test.





# THROMBOPHILIA

## FACTOR V LEIDEN / APCR

CONTROLS

Chronometric assay



### CRYOcheck™ APCR Positive Control



#### Informations

Resistance to activated protein C (APC) is an anomaly described by Dahlbäck in 1993.

Bertina discovered in 1994 the presence of a mutation in the factor V (FV) gene.

This mutation leads to the replacement at position 506 of an arginine by a glutamine (Arg506Gln), which affects one of the sites of cleavage of FV by APC.

As a result, FV "resists" inactivation by APC. The mutated FV is referred to as FV Leiden. This factor V loses its function as a cofactor of the protein C system, that is to say of a system which inhibits coagulation; on the other hand, it retains its procoagulant properties. There are other cases of mutations related to the resistance of activated protein C.

Reference	Presentation	Format
APCR-05	Kit	25 x 0.5 mL

**Heterozygous control for the validation of the assay of resistance to protein C activated by the coagulant method in hemostasis.**

Quality control plasmas are collected from a donor confirmed heterozygous for the Factor V Leiden mutation by molecular biology and not having anticoagulant therapy.

#### Components

- 25 cryotubes x 0.5 mL of frozen plasma

#### Characteristics

- Plasmas verified negative for all tests required by the FDA
- Expiration date of 3 years from the date of manufacture with storage between -40 ° C and -80 ° C
- Defrost in 3 min at 37 ° C
- Ready to use
- Packaging in plastic cryotubes suitable for all STA-R type microgodets



# THROMBOPHILIA

## ANTITHROMBIN

COLORIMETRIC ASSAYS

Colorimetric assay



# TECHNOCHROM® ATIII analyzer Kit



### Associated products

Coagulation Control A  
Coagulation Control N  
Coagulation Reference

### Informations

Previously called antithrombin III (abbreviated AT III), human antithrombin is one of the major physiological inhibitors of coagulation.

A natural serine protease inhibitor, antithrombin acts mainly on thrombin (IIa) and activated Factor X (FXa), as well as on activated forms of Factors IX, XI and XII.

This reaction is catalyzed by heparin. The normal level of antithrombin is between 80 and 120% in adults and it is about half in newborns.

Antithrombin deficiency predisposes to thrombosis.

Reference	Presentation	Number of tests
4-5340224	Kit	100

### Functional antithrombin chromogenic assay kit.

The TECHNOCHROM® AT III modular reagent is a system of reagents for the chromogenic determination optimized for the manual method.



### Components

- 1 vial x reagent A2 (43 IU thrombin / vial)
- 1 vial x reagent Th-1 (10 µmol / vial of chromogenic substrate)
- 2 vials x 0.9% sodium chloride (25 mL)

### Advantages

- Linearity is between 0% and 130% Kinetic method for hemostasis analyzer
- All components can be purchased separately
- After reconstitution 4 weeks stability at room temperature

### Characteristics

The Technochrom® ATIII method is based on the inhibition of an excess but constant amount of thrombin by the heparin-antithrombin complex and then by the hydrolysis of a chromogenic substrate by the residual thrombin.

The amount of para-nitroaniline released during this hydrolysis and measured at 405 nm is inversely proportional to the concentration of antithrombin present in the reaction medium. (Specialized hemostasis)

# THROMBOPHILIA

## GENETIC PANEL

GENOTYPING SETS

Real-time PCR



# THROMBO inCode Kit GEN inCode



Reference	Presentation	Format	Number of tests
10-TIC-RTPCR-16	Kit	1 x 6 tubes	12 x 16 patients
10-TIC-RTPCR-16P	Kit	Prefilled plate	12 x 16 patients

## Informations

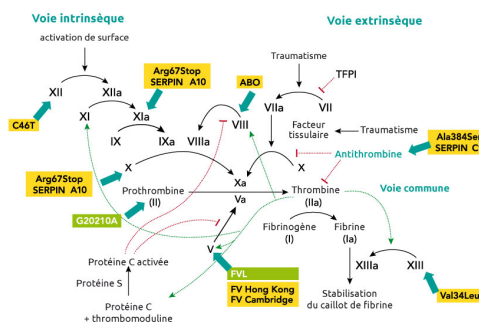
Hereditary thrombophilia is a genetic cause of venous thromboembolism. It is based on genetic mutations and polymorphisms.

**The THROMBO inCode kit is used for the in vitro genotyping of 12 DNA variants associated with thrombosis to improve the preventive strategy in patients at risk of thromboembolic events.**

The THROMBO inCode kit is a real-time PCR test that uses 4 different fluorogens.

## Components

- 6 bottles x Amplimix 1 to 6 ready to use
- 1 TIC positive control vial ready to use



## Advantages

- Specificity > 99% Sensitivity > 99%
- Thrombo inCode automatically integrates in a single tool :
  - A panel of 12 genetic variants predisposing to a thrombotic event
  - An algorithm that calculates a risk score for thrombosis on clinical and genetic data
  - A summary of individualized recommendations. Lifespan 9 months.
- Test time: 2h30
- Protocol validated on CFX 96 / DX platforms from BIO-RAD with CFX MANAGER software, ABI7500 from Life Technologies with ABI7500 software and LightCycler® 480 II from ROCHE with LightCycler® Software. (Specialized hemostasis)

## Characteristics

THROMBO inCode Kit Universal is an allele specific test based on 6 simultaneous real-time PCR reactions. Each reaction analyses 2 loci (4 variants) using 4 allele specific Taqman® probes labelled with different fluorophores: locus 1 (FAM/HEX) and locus 2 (TxR/Atto647N). For each locus, one probe is specific of the major allele and the other one is specific of the minor allele.

Each of the six AmpliMixes used to genotype a sample are dispensed in a 1,5 mL vial. Measured fluorescence signals in each reaction tube are interpreted according to the calculations specified in section 10.3 in order to determine the genotypes of clinical samples.

The application programme of THROMBO inCode Kit facilitates the calculation of genotypes and generation of individualized reports per sample using the fluorescence data obtained.

## THROMBOPHILIA

## C1-INHIBITOR

COLORIMETRIC ASSAYS

## TECHNOCHROM® C1-INH

Colorimetric assay



## Associated products

Coagulation Control A

Coagulation Control N

Coagulation Reference

## Informations

The C1-esterase inhibitor (C1-INH) is a regulatory protein that functions as an inhibitor of several serine proteases in the complement system, the kallikrein-kinin system, the coagulation cascade and in fibrinolysis.

The C1 complement esterase inhibitor (C1-INH) is a serum protein whose major role is the regulation of the classical complement pathway, by inhibiting activated C1r and activated C1s. It also has an inhibitory role in coagulation, fibrinolysis and the kinin system, acting on kallikrein, plasmin, trypsin, chymotrypsin, FXIIa and FXIa. Type I OAH, which accounts for 80 to 85% of patients, is inherited autosomal dominantly, so it is expressed in heterozygotes.

The mutated gene induces a decrease in C1-INH protein, which is collapsed at the time of seizures. Type II OAH, which represents 15 to 20% of patients, also corresponds to an autosomal dominant abnormality, but in which the mutation leads to the synthesis of a non-functional protein present at normal or high levels; Functional C1-INH assay alone can confirm the diagnosis.

Reference	Presentation	Number of tests
4-5345003	Kit	30 à 60

## C1 inhibitor enzymatic assay kit.

Le coffret Technochrom® C1-INH permet le diagnostic de l'oedème héréditaire d'angioneurotique (OAH) par la mesure fonctionnelle en colorimétrie de l'inhibiteur de la C1 plasmatique (C1-INH).

## Components

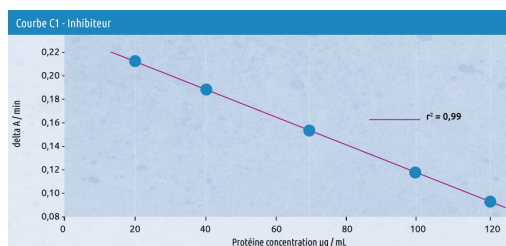
- 1 vial x C1 inhibitor substrate (3 mL)
- 1 vial x C1-Esterase (3 mL)
- 1 vial x test buffer A (25 mL)
- 1 vial x reaction buffer B (20 mL)
- 1 vial x Coagulation Reference (1 mL)
- 1 vial x Coagulation Control A (1 mL)
- 1 vial x Coagulation Control N (1 mL)

## Points forts

- IVD for in vitro diagnostic use
- Each single donor plasma and each lot of Coagulation Control are tested and found negative for HbsAg, HIV 1/2 Ab and HCV Ab. However, universal precautions (treating all human source materials as if potentially infectious) should be exercised.

## Characteristics

C1-INH is a normalizing protein that functions as an inhibitor of several serine proteases in the complement system, the kallikrein-kinin system of the coagulation cascade and in fibrinolysis. This method is based on the inhibition of an excess but constant amount of C1 esterase by the C1-INH / C1 esterase complex and then by the hydrolysis of a chromogenic substrate by the residual C1 esterase. The quantity of para-nitroaniline released during this hydrolysis is measured at 405 nm and is inversely proportional to the concentration of C1-INH present in the reaction medium. (Specialized hemostasis)



# THROMBOPHILIA

## PROTEIN C

COLORIMETRIC ASSAYS

Colorimetric assay



# TECHNOCHROM® Protein C



## Informations

Protein C (PC) is a vitamin K dependent plasma protein that regulates coagulation by inhibiting FVa and FVIIIa and helps limit the extension of the thrombus.

Numerous clinical studies have shown that a PC deficiency (acquired or congenital) is a risk factor for venous thrombosis. PC is a 62 kDa glycoprotein, synthesized by the liver in the presence of vitamin K.

PC circulates in plasma in an inactive form at a concentration of approximately 4 µg / ml.

Thrombin bound to thrombomodulin loses its procoagulant properties and activates PC into activated PC PCa in the presence of its cofactor, protein S, of calcium and phospholipids, is capable of inactivating activated FV and activated FVIII, true catalysts of coagulation, thus blocking the amplification loop of thrombin generation and limiting extension of the thrombus.

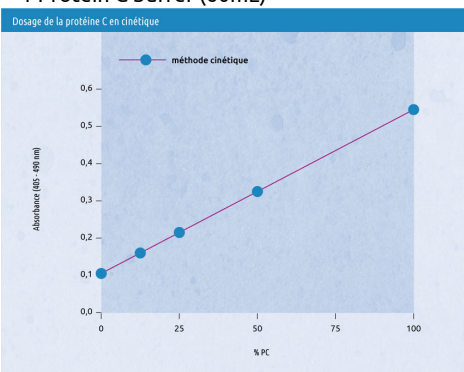
## Quantitative determination of functional protein C in citrated human plasma by chromogenic method in hemostasis.

The TECHNOCHROM® Protein C kit allows functional colorimetric assay of plasma protein C (PC) by amidolytic method, according to a principle of specific activation of PC by a snake venom (Agkistrodon contortrix): PROTAC®. The protein C thus activated hydrolyzes a chromogenic substrate.

The quantity of para-nitroaniline released during this hydrolysis is measured at 405 nm and is proportional to the concentration of protein C present in the reaction medium.

## Components

- 3 vials x 1 mL of Protac®
- 3 vials x 1 mL of PCa-2 substrate
- 1 vial x 1 mL PC 1 (125%)
- 1 vial x 1 mL PC 2 (75%)
- 1 vial x 1 mL PC 3 (25%)
- 1 Protein C buffer (60mL)



## Characteristics

- Technical validation file
- Linearity: 0 - 130 (activity%)
- End point or kinetic method on hemostasis analyzer
- Detection limit: < 1% (activity%) kinetic or end point method
- Stability of reagents on analyzers for 3 days



# THROMBOPHILIA

## PROTEIN C

ELISA SETS

ELISA Assay



### TECHNOZYM® Protein C ELISA Kit



#### Associated products

Coagulation Control A  
Coagulation Control N  
Coagulation Reference

#### Informations

Protein C is a vitamin K dependent plasma protein that regulates coagulation by inhibiting FVa and FVIIIa and helps to limit the extension of the thrombus.

Numerous clinical studies have shown that a protein C deficiency (acquired or congenital) is a risk factor for venous thrombosis. CP is at the center of a physiological clotting inhibitor system. Thrombin binds to thrombomodulin, an integral protein of vascular endothelial cells, and then loses its procoagulant properties at the same time. time it activates PC into activated protein C (PCa).

PCa in the presence of its cofactor, protein S, of calcium and phospholipids, is capable of inactivating activated FV and activated FVIII, true catalysts of coagulation, thus blocking the amplification loop of thrombin generation and limiting extension of the thrombus.

Reference	Presentation	Number of tests
4-TC12021	Kit	12 x 8

#### Quantitative assay of protein C antigen in citrated human plasma by ELISA method.

The TECHNOZYM® Protein C ELISA kit allows the antigenic determination of protein C in human plasma by the ELISA method using 2 polyclonal antibodies.

#### Components

- 12 x 8-wells breakable ELISA strips coated with an anti-protein C monoclonal antibody
- 1 vial x 0.3 mL conjugated polyclonal anti-protein C antibody coupled to peroxidase (POX)
- 1 vial x 12 mL TMB chromogenic substrate
- 1 bottle x 12 mL stop solution
- 1 bottle x 80 mL washing buffer concentrate
- 1 vial x 90 mL incubation buffer
- 5 vials x 0.5 mL calibrators numbered 1 to 5
- 2 vials x 0.5 mL plasma controls, high and low level
- 2 adhesive films

#### Characteristics

The monoclonal antibody at the bottom of the well will capture the protein C of the sample which will be revealed by the polyclonal anti-protein C antibody coupled to the enzyme: peroxidase.

This enzyme hydrolyzes the chromogenic substrate: TMB, to form a colored compound whose reaction will be stopped by sulfuric acid. The calibration is equal to 1 IU/mL = 100% protein C  
Detection limit: 1.65%



# THROMBOPHILIA

## PROTEIN C

ELISA SETS

ELISA Assay



### TECHNOZYM® PCI Actibind® ELISA Kit



#### Associated products

Coagulation Control A  
Coagulation Control N  
Coagulation Reference

#### Informations

The protein C inhibitor (PCI) is a member of the serpin family. (Serine protease inhibitor). It inactivates APC, thrombin, FXa, FXIa, kallikrein, urokinase, and t-PA and u-PA. PCI could be involved in the regulation of fibrinolysis and the C protein system.

Low antigenic and PCI activity values have been determined in patients with disseminated intravascular coagulation (DIC).

Reference	Presentation	Number of tests
4-TC16100	Kit	12 x 8

#### Quantitative antigenic assay of protein C inhibitor (PCI) in citrated human plasma or EDTA by ELISA method.

The Protein C Inhibitor Actibind® ELISA kit allows the antigenic determination of the protein C inhibitor in human plasma by the ELISA method.

#### Components

- 12 breakable ELISA strips of 8 wells
- 1 vial x anti-PCI monoclonal antibody coupled to peroxidase (POX) (0.3 mL)
- 1 vial x lyophilized urokinase
- 1 vial x TMB substrate (12 mL)
- 1 vial x stop solution (15 mL)
- 1 vial x POX dilution buffer (12 mL)
- 2 vials x Sample Dilution Buffer (20 mL)
- 1 vial x wash buffer Concentrate (20 mL)
- 1 vial x lyophilized calibrator (1.0 mL)
- 1 vial x lyophilized top control plasma (1.0 mL)

#### Characteristics

PCI binds to immobilized urokinase and is then revealed by a monoclonal antibody coupled to the enzyme: peroxidase. This enzyme hydrolyzes the chromogenic substrate: TMB, to form a colored compound whose reaction will be stopped by sulfuric acid. Antigen PCI levels are related to disseminated intravascular coagulation (DIC).



# THROMBOPHILIA

## PROTEIN C

CHRONOMETRIC DOSAGE SETS

### CRYOcheck™ Clot C™

Chronometric assay



#### Associated products

CRYOcheck™ Factor VIII Deficient Plasma  
 CRYOcheck™ Factor II Deficient Plasma  
 CRYOcheck™ Factor IX Deficient Plasma  
 CRYOcheck™ Factor V Deficient Plasma  
 CRYOcheck™ Factor VII Deficient Plasma  
 CRYOcheck™ Factor X Deficient Plasma  
 CRYOcheck™ Factor XI Deficient Plasma  
 CRYOcheck™ Factor XII Deficient Plasma

#### Auxiliary reagents

C Diluent / S Diluent

#### Informations

PC is a vitamin K dependent plasma glycoprotein. In the presence of its cofactor, protein S, calcium and phospholipids, it exerts an anticoagulant activity by inactivating FVa and FVIIa. It also promotes fibrinolysis (clot lysis) by inactivating PAI-1 - (plasminogen activator inhibitor -1)

Reference	Presentation	Format	Number of tests
CCC-15	Kit	2 x 5 x 1.5 mL	150
CCC-30	Kit	2 x 5 x 3.0 mL	300

#### Determination of functional protein C in citrated human plasma by coagulant method.

The CRYOcheck™ Clot C™ kit allows the determination of functional protein C by chronometric method in human plasma.

#### Components

Protein C Deficient Plasma :  
 - 5 vials x 3 or 1.5mL  
 Clot C Activator :  
 - 5 vials x 3 or 1.5mL

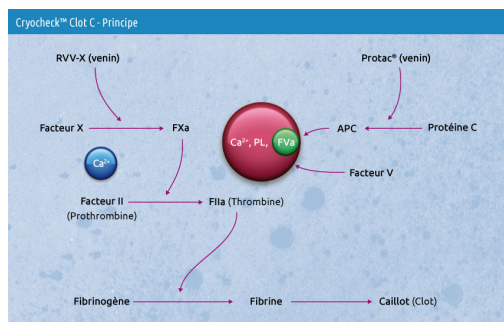
#### Advantages

- Unaffected by high FVIII levels: 600%
- No interference with heparins: 1.2 IU / mL
- No additional dilutions
- No waste
- Suitable for large series
- No reconstitution
- Easy identification
- Vials suitable for hemostasis analyzers

#### Characteristics

It works by direct activation of protein C in the patient's plasma. Activation of the common pathway of coagulation is initiated by Russel viper venom (RVV-X) which activates factor X to factor Xa and thus eliminates the influence of other factors upstream of the common pathway. (Specialized hemostasis)  
 Patients with protein C deficiency or dysfunction will have a shorter clotting time. The clotting time is proportional to the amount of PC in the patient's plasma.

- Route of activation by RVV-X by two venoms RVV-X and PROTAC®
- Linearity -> 5 to 150%
- Stability 8 hours after opening and refrozen
- Frozen presentation
- Compact, color-coded boxes for easier identification in freezers
- Expiration date : 2 years from the date of manufacture with storage between -40 °C and -80 °C





# THROMBOPHILIA

## PROTEIN S

CHRONOMETRIC DOSAGE SETS

Chronometric assay



### ACTICLOT® Protein S



Reference	Presentation	Number of tests
11-843L	Kit	40

#### Informations

Protein S is a vitamin K dependent protein. It is a physiological inhibitor of coagulation. It acts as a cofactor of activated protein C by promoting the inactivation of FVa and FVIIIa, prothrombin, of the prothrombinase complex, FX.

A protein S deficiency can be either acquired (hepatocellular insufficiency, vitamin K deficiency, anti-protein S antibody, ...) or constitutional (heterozygous or homozygous deficiency) grouped into 2 types depending on whether the deficiency is quantitative (type I) or qualitative (type II).

#### ACTICLOT® Protein S is a plasma coagulation test.

The ACTICLOT® Protein S kit is a coagulating method allowing the quantitative determination of Protein S activity in citrated human plasma.

#### Components

Activation reagent (R1):  
 - 4 vials x 1 mL, lyophilized.  
 Each vial contains Human Activated Protein C, Bovine Factor Xa and Phospholipids.  
 Protein S (R2) deficient plasma:  
 - 4 vials x 1 mL, freeze-dried  
 Sample dilution buffer 10 x concentrate (R3)  
 Plasma control Protein S (R4):  
 - 2 vials x 0.5 mL, freeze-dried

#### Advantages

The lyophilized presentation allows greater stability until the expiration date.

#### Characteristics

Dilutions of normal plasmas are carried out in a plasma deficient in Protein S. The plasmas diluted are then activated by a reagent containing factor Xa, activated Protein C and phospholipids. After 5 minutes of incubation, the clot formation is triggered by the addition of calcium chloride. Under these conditions, the prolongation of the clotting time is directly proportional to the concentration of Protein S present in the plasma. The kit allows the performance of 40-160 tests, depending on the performance of the assay by manual or automatic method and depending on the type of instrument used.

# THROMBOPHILIA

## PROTEIN S

CHRONOMETRIC DOSAGE SETS

### CRYOcheck™ Clot S™

Chronometric assay



#### Associated products

CRYOcheck™ Factor VIII Deficient Plasma  
 CRYOcheck™ Factor II Deficient Plasma  
 CRYOcheck™ Factor IX Deficient Plasma  
 CRYOcheck™ Factor V Deficient Plasma  
 CRYOcheck™ Factor VII Deficient Plasma  
 CRYOcheck™ Factor X Deficient Plasma  
 CRYOcheck™ Factor XI Deficient Plasma  
 CRYOcheck™ Factor XII Deficient Plasma

#### Auxiliary reagents

C Diluent / S Diluent

#### Informations

Protein S is a vitamin K dependent protein. It is a physiological inhibitor of coagulation. It acts as a cofactor of activated protein C by promoting the inactivation of FVa and FVIIIa, prothrombin, of the prothrombinase complex, FX. A protein S deficiency can be either acquired (hepatocellular insufficiency, vitamin K deficiency, anti-protein S antibody, ...) or constitutional (heterozygous or homozygous deficiency) grouped into 2 types depending on whether the deficiency is quantitative (type I) or qualitative (type II).

Reference	Presentation	Format	Number of tests
CCS-15	Kit	2 x 5 x 1.5 mL	150
CCS-30	Kit	2 x 5 x 3.0 mL	300

#### Determination of functional protein S in citrated human plasma by coagulant method.

The CRYOcheck™ Clot S™ kit allows the determination of functional protein S by chronometric method in human plasma.

#### Components

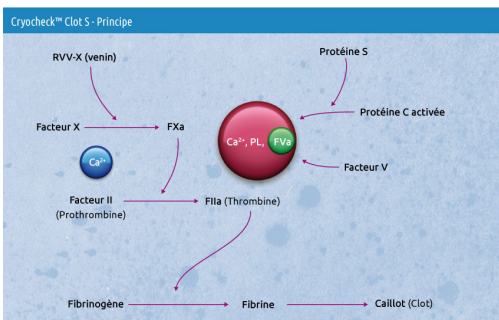
Protein S deficient plasma :  
 - 5 vials x 3 or 1.5mL  
 Clot S™ Activator :  
 - 5 vials x 3 or 1.5mL

#### Advantages

- Unaffected by high FVIII levels: 600%
- No interference with heparins: 1.2 IU / mL
- No additional dilutions
- No waste
- Suitable for large series
- No reconstitution
- Easy identification
- Vials suitable for hemostasis analyzers

#### Characteristics

- The CRYOcheck™ Clot S™ set activates the common coagulation pathway by Russel viper venom (RVV-X) which activates factor X to factor Xa in the presence of activated protein C and thus eliminates the influence of other upstream factors of the common way. (Specialized hemostasis)
- Route of activation by RVV-X
- Linearity : 5 to 150%
- Stability 8 hours after opening
- Frozen presentation
- Compact, color-coded boxes for easier identification in freezers
- Expiration date of 2 years from the date of manufacture with storage between -40 °C and -80 °C



## THROMBOPHILIA

## TISSUE FACTOR

COLORIMETRIC ASSAYS

Colorimetric assay



## ACTICHROME® TF



## Informations

For people with a documented thrombotic event and a family history of thrombosis, assaying clotting factor activity is crucial in diagnosing pathology.

Deficiencies in natural anticoagulants can lead to venous thrombosis: superficial venous thrombosis, deep vein thrombosis and pulmonary embolism.

The specific coagulation factors released by the vascular endothelium, as well as the surface expression of thrombomodulin and tissue factor pathway inhibitor (TFPI) provide information on the functional status of the endothelium.

**This kit allows the chromogenic assay of the pro-coagulant activity of tissue factor in cell lysates and in human plasma.**

ACTICHROME® TF allows the detection of native and recombinant lipid-replenished human tissue factor. No interference was observed by other coagulation factors.

## Components

- 1 vial x assay buffer (10x concentrate) (5 mL)
- 2 vials x Human Factor VIIa (lyophilized)
- 2 vials x Human Factor X (lyophilized)
- 2 vials x SPECTROZYME® FXa, substrate (5 µmol) (lyophilized)
- 2 vials x FT / TFPI depleted plasma (0.5 mL) (lyophilized)
- 1 vial x relipidated human tissue factor, (500 pM) (lyophilized)

## Advantages

The lyophilized presentation allows greater stability until the expiration date.

## Characteristics

The ACTICHROME® TF kit measures FT activity in cell lysates and in plasma samples.

The samples are mixed with human FVIIa and FX. The FT / FVIIa complexes thus formed transform the FX into FXa.

The amount of factor Xa generated is measured by its ability to cleave a highly specific chromogenic substrate for FXa. Following the cleavage of the substrate, the chromophore group of para-nitroaniline (pNA) is thus released and measured at 405nm, then compared to the absorbances obtained using a calibration curve made with a known quantity of FT.

This set is intended for research use. It is not recommended for diagnostic or therapeutic use.

Reference	Presentation	Number of tests
11-846	Kit	100

## THROMBOPHILIA

## TISSUE FACTOR

COLORIMETRIC ASSAYS

Colorimetric assay



## ACTICHROME® TFPI



## Informations

For people with a documented thrombotic event and a family history of thrombosis, assaying for clotting factor activity is crucial in diagnosing the disease.

Deficiencies in natural anticoagulants can lead to venous thrombosis: superficial venous thrombosis, deep vein thrombosis and pulmonary embolism. Specific coagulation factors released by vascular endothelium, thrombomodulin, and tissue factor pathway inhibitor provide information on endothelial dysfunction.

**ACTICHROME® TFPI is a kit for the chromogenic assay of TFPI activity in human plasma.**

ACTICHROME® TFPI is a kit for the chromogenic assay of the activity of the Tissue Factor Pathway Inhibitor (TFPI, or EPI, LACI1) in human plasma where the latter has an inhibitory effect on the Tissue Factor complex-FVIIa.

## Components

- Reference plasma TFPI : 1 vial x 0.5 mL, 1 U/mL (lyophilized)
- TFPI-depleted plasma : 2 vials x 0.5 mL (lyophilized)
- Human X factor : 1 vial x 25 µg (lyophilized)
- Lipid-replenished human tissue factor : 1 vial x 50 ng (lyophilized)
- Human Factor VIIa : 1 vial (lyophilized)
- SPECTROZYME® FXa, substrate : 1 vial x 5 µmol (lyophilized)
- Reaction buffer : 1 vial x 5 mL, 5 x concentrate
- TFPI Standard : 1 vial x 0.2 U/mL (lyophilized)

## Advantages

The lyophilized presentation allows greater stability until the expiration date.

## Characteristics

The ACTICHROME®TFPI kit measures the capacity of TFPI to inhibit the catalytic activity of the FT / FVIIa complex which activates FX in Xa. After incubation of the samples to be tested with FT / FVIIa and factor X, the residual activity of the FT/FVIIa complex is measured using a chromogenic substrate highly specific for factor Xa, which releases, after cleavage by FXa, a para-nitroaniline chromophore group (pNA).

The absorbance of pNA in the solution is measured at 405 nm and the values obtained are compared to those of a standard line plotted using known activity levels of TFPI.

This test can be carried out by kinetic or end point method. This set is intended for research use. It is not recommended for diagnostic or therapeutic use.

Reference	Presentation	Number of tests
11-848	Kit	100

## ADAMTS-13

## ADAMTS-13 ACTIVITY

ELISA SETS

ELISA Assay



## TECHNOZYM® ADAMTS-13 Activity ELISA



## Associated products

TECHNOZYM® ADAMTS-13 Activity Cal Set

TECHNOZYM® ADAMTS-13 Activity Control Set

## Informations

ADAMTS13 (a disintegrin-like and metalloproteinase with thrombospondin type 1 motif 13) is an enzyme (VWFcleaving protease or VWF-CP) that specifically cleaves von Willebrand factor (VWF), which induce platelet thrombus formation under high shear stress.

If the activity of ADAMTS13 is lowered for some reason, however, unusually large VWF multimers may accumulate, causing thrombosis due to platelet aggregation, which in turn may lead to TMA (thrombotic microangiopathy) such as TTP (thrombotic thrombocytopenic purpura).

Reference	Presentation	Number of tests
4-5450701	Kit	12 x 8

## Determination of ADAMTS-13 activity in colorimetry

TECHNOZYM® ADAMTS-13 Activity ELISA is a chromogenic test for the determination of ADAMTS-13 activity in human plasma by ELISA method at 450nm.

## Components

- 12 x 8 wells ELISA test stripes
- 3 adhesives for ELISA plate
- 2 vials x lyophilized substrate (6 mL)
- 1 vial x conjugated antibody (12 mL)
- 1 vial x chromogenic substrate (12 mL)
- 1 bottle x stop solution (12 mL)
- 1 vial x reaction buffer (30 mL)
- 1 vial x Wash Buffer Concentrate 10 x (53 mL)
- Sample dilution microplate
- 6 vials x lyophilized calibrators (0,5 mL)
- 1 vial x lyophilized low control plasma (0,5 mL)
- 1 vial x lyophilized high control plasma (0,5 mL)

## Characteristics

- Stability 6 weeks after opening a set.
- Reaction time 190 minutes.
- 6 calibrators from 0 to 1 IU / mL. (depending on the lots)
- 2 controls of 0.20 to 0.70 IU / mL. (depending on the lots)

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ACTIVITY

ELISA CALIBRATORS

ELISA Assay



## TECHNOZYM® ADAMTS-13 Activity Cal Set



## Associated products

TECHNOZYM® ADAMTS-13 Activity ELISA

TECHNOZYM® ADAMTS-13 Activity Control Set

## Informations

ADAMTS13 (a disintegrin-like and metalloproteinase with thrombospondin type 1 motif 13) is an enzyme (VWFcleaving protease or VWF-CP) that specifically cleaves von Willebrand factor (VWF), which induce platelet thrombus formation under high shear stress.

If the activity of ADAMTS13 is lowered for some reason, however, unusually large VWF multimers may accumulate, causing thrombosis due to platelet aggregation, which in turn may lead to TMA (thrombotic microangiopathy) such as TTP (thrombotic thrombocytopenic purpura).

Reference	Presentation	Format
4-5450761	Vial	6 x 0.5 mL

## Calibration plasmas for the determination of ADAMTS-13 activity.

A range of 6 additional calibrators for the TECHNOZYM® ADAMTS-13 Activity ELISA.



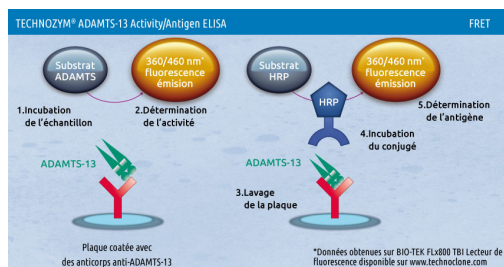
## Components

- 6 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)  
- 6 calibrators from 0 to 1 IU / mL. (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ACTIVITY

ELISA CONTROLS

ELISA Assay



## TECHNOZYM® ADAMTS-13 Activity Control Set



## Associated products

TECHNOZYM® ADAMTS-13 Activity ELISA

TECHNOZYM® ADAMTS-13 Activity Cal Set

## Informations

ADAMTS13 (a disintegrin-like and metalloproteinase with thrombospondin type 1 motif 13) is an enzyme (VWFcleaving protease or VWF-CP) that specifically cleaves von Willebrand factor (VWF), which induce platelet thrombus formation under high shear stress.

If the activity of ADAMTS13 is lowered for some reason, however, unusually large VWF multimers may accumulate, causing thrombosis due to platelet aggregation, which in turn may lead to TMA (thrombotic microangiopathy) such as TTP (thrombotic thrombocytopenic purpura).

Reference	Presentation	Format
4-5450763	Vial	2 x 0.5 mL

## Control plasmas for the determination of ADAMTS-13 activity.

Additional high and low quality controls for the TECHNOZYM® ADAMTS-13 Activity ELISA.



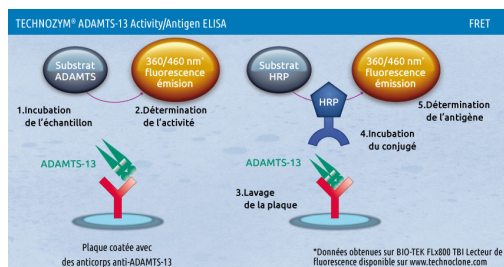
## Components

- 2 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)  
- 2 controls of 0.20 to 0.70 IU / mL. (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ANTIGEN

ELISA SETS

ELISA Assay



## TECHNOZYM® ADAMTS-13 Antigen ELISA



## Associated products

TECHNOZYM® ADAMTS-13 Antigen Calibrator Set

TECHNOZYM® ADAMTS-13 Antigen Control Set

## Informations

ADAMTS-13 is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of vWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

Reference	Presentation	Number of tests
4-5450601	Kit	12 x 8

## ADAMTS-13 antigen assay in colorimetry.

The TECHNOZYM® ADAMTS-13 Antigen ELISA kit is a 450nm chromogenic test for the antigenic determination of ADAMTS-13 in human plasma.

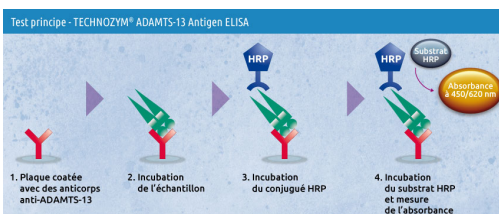
## Components

- 12 x 8 wells breakable ELISA test strips
- 2 adhesives for ELISA plate
- 1 vial x conjugated antibody (0.3 mL)
- 1 vial x chromogenic substrate (12 mL)
- 1 vial x stop solution (12 mL)
- 1 vial x 10 x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL)
- 5 vials x lyophilized calibrators (0.5 mL)
- 1 vial x lyophilized high control plasma (0.5 mL)
- 1 vial x lyophilized low control plasma (0.5 mL)

## Characteristics

- Stability 6 months after opening.
- Reaction time 210 minutes.
- 5 calibrators from 0 to 1 IU / mL (depending on the lot).
- 2 controls from 0.20 to 0.70 IU / mL (depending on the lot).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.





## ADAMTS-13

## ADAMTS-13 ANTIGEN

ELISA CALIBRATORS

ELISA Assay



# TECHNOZYM® ADAMTS-13 Antigen Calibrator Set



## Associated products

TECHNOZYM® ADAMTS-13 Antigen Control Set

TECHNOZYM® ADAMTS-13 Antigen ELISA

## Informations

ADAMTS-13 is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of VWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

Reference	Presentation	Format
4-5450661	Vial	5 x 0.5 mL

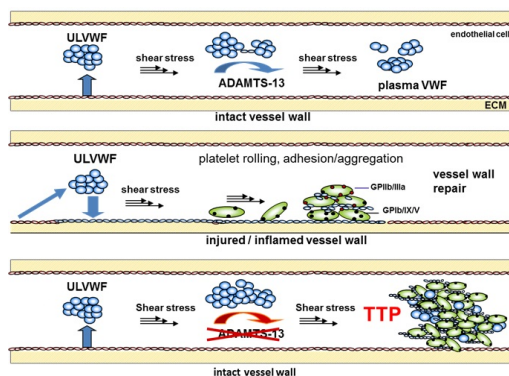
### Calibration plasmas for the antigenic assay of ADAMTS-13.

A range of 5 additional calibrators for the TECHNOZYM® ADAMTS-13 antigen ELISA



## Components

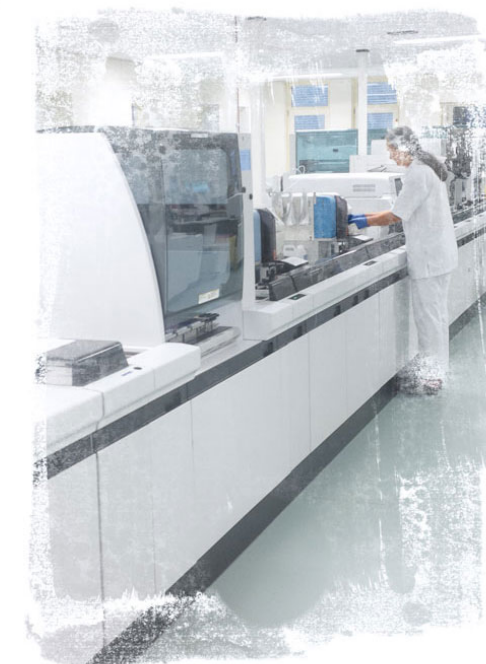
- 5 vials x 0.5 mL lyophilized plasma



## Characteristics

- Stability 6 months after reconstitution (-20 °C)
- 5 calibrators from 0 to 1 IU / mL. (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ANTIGEN

ELISA CONTROLS

ELISA Assay



# TECHNOZYM® ADAMTS-13 Antigen Control Set



## Associated products

TECHNOZYM® ADAMTS-13 Antigen Calibrator Set

TECHNOZYM® ADAMTS-13 Antigen ELISA

## Informations

ADAMTS-13 is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of vWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

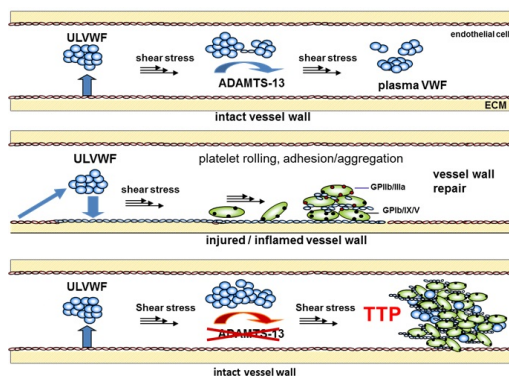
Reference	Presentation	Format
4-5450663	Vial	2 x 0.5 mL

## Control plasmas for the antigenic assay of ADAMTS-13.

Additional high and low quality controls for the TECHNOZYM® ADAMTS-13 antigen ELISA.

## Components

- 2 vials x 0.5 mL lyophilized plasma



## Characteristics

- Stability 6 months after reconstitution (-20 °C)  
- 2 controls of 0.20 to 0.70 IU / mL. (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 INHIBITORS

ELISA SETS

ELISA Assay



## TECHNOZYM® ADAMTS-13 INH ELISA



## Associated products

TECHNOZYM® ADAMTS-13 INH Calibrator Set

TECHNOZYM® ADAMTS-13 INH Control Set

## Informations

This protease has the role of regulating the size of abnormally large multimers of von Willebrand factor.

The presence of anti-ADAMTS-13 autoantibodies inhibits the cleavage activity of this enzyme, causing accumulation of high molecular weight VWF multimer in plasma.

These autoantibodies are considered to be the main cause of PTT (Thrombotic Thrombocytopenic Purpura). TECHNOZYM® ADAMTS-13 INH helps monitor the effectiveness of plasma exchange therapy, and differentiate the congenital and acquired form of the disease when combined with an ADAMTS-13 activity test.

Reference	Presentation	Number of tests
4-5450401	Kit	12 x 8
4-5450451	Kit	6 x 8

## Determination of ADAMTS-13 inhibitors by colorimetry

TECHNOZYM® ADAMTS-13 INH ELISA is a chromogenic test for the detection in plasma or serum of human autoantibodies directed against ADAMTS-13 by ELISA method at 450nm.

## Components

- 12 x 8-well breakable ELISA test strips
- 2 adhesives for ELISA plate
- 1 vial x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL)
- 5 vials x lyophilized calibrators (0.5 mL)
- 1 vial x lyophilized positive control plasma (0.5 mL)
- 1 vial x lyophilized negative control plasma (0.5 mL)
- 1 vial x conjugated antibody (0.3 mL)
- 1 vial x chromogenic substrate (12 mL)
- 1 vial x stop solution (12 mL)

## Characteristics

- Stability 2 months after opening
- Reaction time 210 minutes
- 5 calibrators with a measurement range between 0 and 100 IU / mL (depending on the lots)
- 1 control around 10 to 50 IU / mL (depending on the lots)
- 1 control around 60 to 100 IU / mL (depending on the lots)
- Specialized hemostasis.



## ADAMTS-13

## ADAMTS-13 INHIBITORS

ELISA CALIBRATORS

ELISA Assay



## TECHNOZYM® ADAMTS-13 INH Calibrator Set



## Associated products

TECHNOZYM® ADAMTS-13 INH ELISA

TECHNOZYM® ADAMTS-13 INH Control Set

## Informations

This protease has the role of regulating the size of abnormally large multimers of von Willebrand factor.

The presence of anti-ADAMTS-13 autoantibodies inhibits the cleavage activity of this enzyme, causing accumulation of high molecular weight VWF multimer in plasma.

These autoantibodies are considered to be the main cause of PTT (Thrombotic Thrombocytopenic Purpura).

Reference	Presentation	Format
4-5450461	Vial	5 x 0.5 mL

## Calibration plasmas for the antigenic assay of ADAMTS-13.

A range of 5 additional calibrators for the TECHNOZYM® ADAMTS-13 INH.



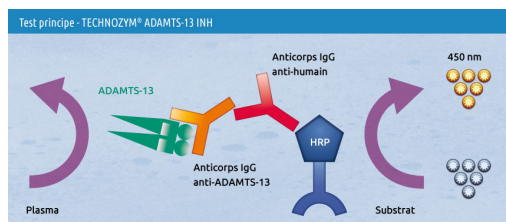
## Components

- 5 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)  
- 5 calibrators with a measurement zone between 0 and 100 IU / mL (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 INHIBITORS

ELISA CONTROLS

ELISA Assay



## TECHNOZYM® ADAMTS-13 INH Control Set



## Associated products

TECHNOZYM® ADAMTS-13 INH ELISA

TECHNOZYM® ADAMTS-13 INH Calibrator Set

## Informations

This protease has the role of regulating the size of abnormally large multimers of von Willebrand factor.

The presence of anti-ADAMTS-13 autoantibodies inhibits the cleavage activity of this enzyme, causing accumulation of high molecular weight VWF multimer in plasma.

These autoantibodies are considered to be the main cause of PTT (Thrombotic Thrombocytopenic Purpura).

Reference	Presentation	Format
4-5450463	Vial	2 x 0.5 mL

## Control plasmas for the antigenic assay of ADAMTS-13.

Additional quality controls for TECHNOZYM® ADAMTS-13 INH.

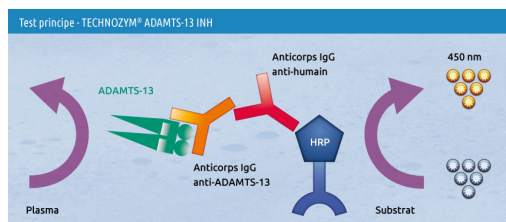
## Components

- 2 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)
- 1 control around 10 to 40 IU / mL (depending on the lots).
- 1 control around 60 to 100 IU / mL (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ACTIVITY ANTIGEN

FLUORIMETRIC ELISA ASSAY SETS

Fluorometric assay



# TECHNOZYM® ADAMTS13 Activity/Antigen ELISA



## Associated products

TECHNOZYM® ADAMTS13 Activity/Antigen Cal Set

TECHNOZYM® ADAMTS13 Activity/Antigen Cont Set

Reference	Presentation	Number of tests
4-5450501	Kit	12 x 8
4-5450551	Kit	6 x 8

## Determination of ADAMTS-13 in fluorimetry.

The TECHNOZYM® ADAMTS13 Activity / Antigen ELISA kit allows the determination of the activity and antigen of ADAMTS-13 by fluorimetry at 360/460 nm.

## Informations

ADAMTS-13 antigen which is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of VWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

## Components

- Ref. 4-5450551: 6 breakable ELISA strips x 8 wells
- Ref. 4-5450501: 12 breakable ELISA strips x 8 wells
- 2 adhesives for ELISA plate
- 1 vial x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL) 5 vials x lyophilized calibrators (0.5 mL)
- 1 vial x lyophilized low control plasma (0.5 mL)
- 1 vial x lyophilized top control plasma (0.5 mL) Ref. 4-5450551: 1 vial x activity substrate (3 mL)
- Ref. 4-5450501: 2 vials x activity substrate (3 mL)
- 1 vial x antibody conjugate concentrate (0.3 mL) 1 vial x antigen substrate (6 mL)
- 1 vial x stable peroxide solution (0.7 mL)
- 1 vial x stop solution (6 mL)

## Characteristics

- Stability 2 months after opening.
- Reaction time 210 minutes.
- 6 calibrators from 0 to 1 IU / mL. (depending on the lots)
- 2 controls of 0.20 to 0.70 IU / mL. (depending on the lots)
- Specialized hemostasis

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ACTIVITY ANTIGEN

ELISA CALIBRATORS

Fluorometric assay



# TECHNOZYM® ADAMTS13 Activity/Antigen Cal Set



## Associated products

TECHNOZYM® ADAMTS13 Activity/Antigen ELISA

TECHNOZYM® ADAMTS13 Activity/Antigen Cont Set

## Informations

ADAMTS-13 antigen which is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of VWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

Reference	Presentation	Format
4-5450561	Vial	5 x 0.5 mL

### Calibration plasmas for the determination of ADAMTS-13 factor.

A range of additional calibrators for the TECHNOZYM® ADAMTS-13.



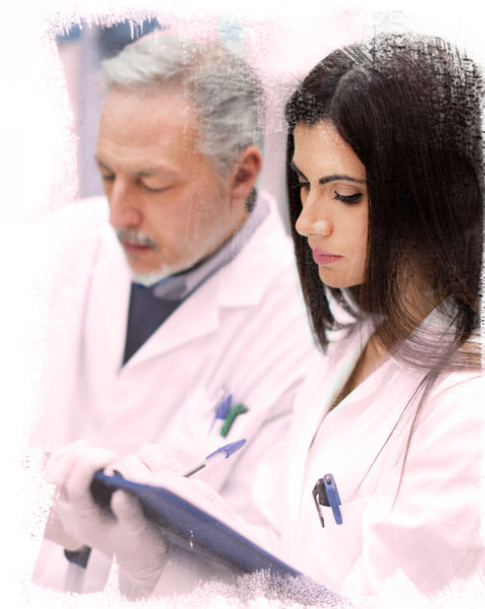
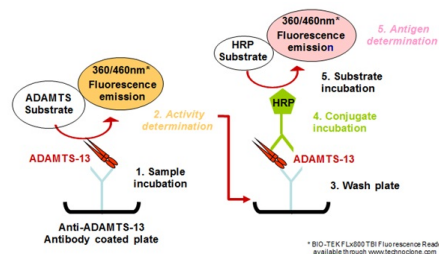
## Components

- 5 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)
- Normal values for ADAMTS-13 activity are between: 0.31-1.31 IU / mL (depending on the lots)

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.



## ADAMTS-13

## ADAMTS-13 ACTIVITY ANTIGEN

ELISA CONTROLS

Fluorometric assay



# TECHNOZYM® ADAMTS13 Activity/Antigen Cont Set



## Associated products

TECHNOZYM® ADAMTS13 Activity/Antigen ELISA

TECHNOZYM® ADAMTS13 Activity/Antigen Cal Set

## Informations

ADAMTS-13 antigen which is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions. A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of vWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

Reference	Presentation	Format
4-5450563	Vial	2 x 0.5 mL

### Control plasmas for the determination of ADAMTS-13 factor.

Additional high and low quality controls for TECHNOZYM® ADAMTS-13.



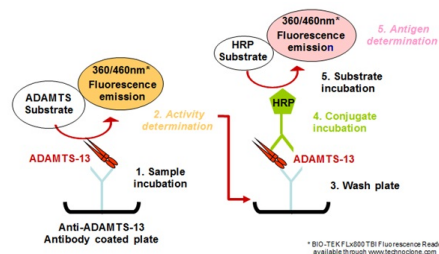
## Components

- 2 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months after reconstitution (-20 °C)  
- 2 controls of 0.20 to 0.70 IU / mL. (depending on the lots).

Since October 2015, the controls and calibrators in the kit have been calibrated against the 1st WHO international standard (NIBSC code 12/252) in IU / mL.





## ADAMTS-13

## ADAMTS-13 UNIT ACTIVITY

UNIT DOSAGE BOXES

Unit dosage



## TECHNOSCREEN® ADAMTS13 Activity



Reference	Presentation	Number of tests
4-5700100	Kit	10

## Informations

ADAMTS-13 is an enzyme responsible for the cleavage of von Willebrand factor under blood flow conditions.

A functional defect in the activity of this enzyme leads to the presence of high molecular weight isoforms of vWF, and thus leads to increased platelet aggregation mainly in areas of microvascularization.

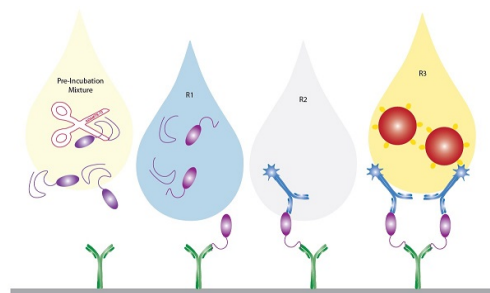
This is the known major cause of Thrombotic Thrombocytopenic Purpura (TTP).

**The TECHNOSCREEN® ADAMTS-13 Unit Test is a semi-quantitative system for the determination of ADAMTS-13 protease activity in citrated human plasma.**

This test was designed to be used as a first-line test to quickly estimate ADAMTS-13 activity.

## Components

- 10 unit tests
- 10 pre-incubation tubes containing vWF fragments
- 1 vial x reagent R1 (4mL)
- 1 vial x reagent R2 (1mL)
- 1 vial x reagent R3 (1mL)
- 11 large pipettes (300 µL)
- 22 small pipettes (60 µL)
- 1 short Instruction pad
- 1 reference color chart



## Characteristics

Principle of the test: the patient's plasma is incubated with a fragment of vWF.

The specific cleavage of this fragment by ADAMTS-13 is then detected with a labeled antibody directed against the cleaved fragment of vWF.

The intensity of the stain is directly proportional to the amount of cleaved substrate, and therefore to the activity of ADAMTS-13 in the plasma sample.

Each ADAMTS-13 deficiency should be confirmed with a quantitative assay system.



## VON WILLEBRAND FACTOR

## VWF ANTIGEN

ELISA SETS

ELISA Assay



## TECHNOZYM® VWF:Ag ELISA



## Associated products

TECHNOZYM® VWF:Ag Calibrator Set

TECHNOZYM® VWF:Ag Control Set

TECHNOZYM® VWF:CBA Calibrator Set

TECHNOZYM® VWF:CBA Control Set

## Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis.

VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa.

A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

Reference	Presentation	Number of tests
4-5450201	Kit	12 x 8

**ELISA kit for the determination of Von Willebrand factor.**

Antigenic determination of von Willebrand factor in plasma and plasma concentrates using 2 polyclonal antibodies.

Classification of Von Willebrand disease type 1, 2 or 3 is possible using the VWF : CBA ELISA kit. (Specialized hemostasis)

## Components

- 12 breakable ELISA strips (12 x 8 wells)
- 2 adhesives for ELISA plate
- 1 vial x anti-VWF-POX conjugate antibody (0.3 mL)
- 1 vial x TMB substrate (12 mL)
- 1 vial x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL)
- 5 vials x freeze-dried calibrators
- 1 vial x lyophilized low control plasma
- 1 vial x lyophilized high control plasma

## Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with high molecular weight (HPM) forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

## Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates.
- Better distinguish types 2A and 2B from type 1.
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Used to identify samples with a proven deficit of VWF multimers.
- Stability 6 months after opening.
- Reaction time 60 minutes.
- Sensitivity : 0 - 1.5 IU / mL
- Detection limit : 0.01 IU / mL



# VON WILLEBRAND FACTOR

## VWF ANTIGEN

ELISA CALIBRATORS

ELISA Assay



### TECHNOZYM® VWF:Ag Calibrator Set



#### Associated products

TECHNOZYM® VWF:Ag Control Set

TECHNOZYM® VWF:Ag ELISA

TECHNOZYM® VWF:CBA Calibrator Set

TECHNOZYM® VWF:CBA Control Set

TECHNOZYM® VWF:CBA ELISA Collagen Type I

TECHNOZYM® VWF:CBA ELISA Collagen Type VI

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis.

VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa.

A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

Reference	Presentation	Format
4-5450210	Vial	5 x 0.5 mL

#### Calibration plasmas for the antigenic assay by ELISA of von Willebrand factor.

A range of 5 additional calibrators for the TECHNOZYM® VWF: Ag ELISA kit.



#### Components

- 5 vials x 0.5 mL lyophilized plasma

#### Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates.
- Better distinguish types 2A and 2B from type 1.
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Used to identify samples with a proven deficit of VWF multimers.
- Stability 6 months at -20 °C.
- Sensitivity : 0 - 1.5 IU / mL.
- Detection limit : 0.01 IU / mL

# VON WILLEBRAND FACTOR

## VWF ANTIGEN

ELISA CONTROLS

ELISA Assay



# TECHNOZYM® VWF:Ag Control Set



### Associated products

TECHNOZYM® VWF:Ag Calibrator Set

TECHNOZYM® VWF:Ag ELISA

TECHNOZYM® VWF:CBA Calibrator Set

TECHNOZYM® VWF:CBA Control Set

### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis.

VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa.

A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

Reference	Presentation	Format
4-5450212	Vial	2 x 0.5 mL

**Control plasmas for the antigenic assay by ELISA of von Willebrand factor.**

Additional high and low controls for the TECHNOZYM® VWF : Ag ELISA kit.



### Components

- 2 vials of 0.5 mL lyophilized plasma

### Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates.
- Better distinguish types 2A and 2B from type 1.
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Used to identify samples with a proven deficit of VWF multimers.
- Stability of 6 months at -20 °C.
- Sensitivity : 0 - 1.5 IU / mL
- Detection limit : 0.01 IU / mL

# VON WILLEBRAND FACTOR VWF PROPEPTIDE ANTIGEN

ELISA SETS

## INTER-ARRAY VWF:PP ELISA Kit



### Associated products

INTER-ARRAY VWF:PP Sample Diluent

INTER-ARRAY VWF:PP Wash Buffer Concentrate

### Informations

Von Willebrand Factor (VWF) is a large multimeric plasma protein with important functions in primary hemostasis. VWF is synthesized in endothelial cells and megakaryocytes as pre-pro-VWF. After various posttranslational modifications and cleavage of the signal peptide, the propeptide (VWF:PP) is also cleaved off by the protease furin in the trans-Golgi-system.

A non-covalent complex of VWF and VWF:PP remains stored in Weibel-Palade bodies (endothelium) or in  $\alpha$ -granules (megakaryocytes). Activation or stimulation of these cells will release the complex. VWF and VWF:PP dissociate and metabolize with different half-lives. While VWF has a half-life of approx. 12 hours, VWF:PP is metabolized with a half-life of only approx. 2 hours.

Reference	Presentation	Number of tests
33-13.02.095.0096	Kit	12 x 8

**The VWF:PP ELISA kit is intended for the quantitative enzyme immunoassay of von Willebrand factor propeptide (VWFpp) in plasma. This assay allows, in association with VWF:AG, to characterize the type of VWF deficiency. The VWF:PP ELISA provides a result with few steps in 90 to 150 min with high precision.**

The components in the kit for 96 tests have excellent stability. The VWF:PP is designed for manual processing and automated ELISA systems.

### Components

- 12 strips with 8 wells coated with an anti-VWF:PP monoclonal antibody
- 1 x 6 mL of anti-VWF:PP monoclonal antibody coupled to an enzyme,
- 1 x 12 mL of substrate solution,
- 1 x 15 mL of stop solution,
- 2 x 25 mL of sample diluent,
- 1 x 100 mL of concentrated wash buffer,
- 1 vial of freeze-dried calibration plasma
- 1 vial of freeze-dried control plasma
- 1 plastic frame
- 1 sheet with calibrator and control values

### Advantages

The calibration is performed against the International Standard. Control and calibrator are included in the kit.

### Characteristics

The molar ratio of VWF:PP to VWF can be used as an indicator for the degradation of VWF. An increased ratio of VWF:PP to VWF indicates increased clearance of VWF. These are found in various patients with congenital VWF deficiency, but also in acquired VWF syndrome. An accurate knowledge of the clearance of VWF may influence the choice of therapy, in particular the need to administer VWF concentrates. Increased levels of VWF:PP or an abnormal ratio between VWF:PP and VWF may also be caused by activation of the endothelium or platelets.



# VON WILLEBRAND FACTOR

## VWF : COLLAGEN BINDING ASSAYS

ELISA SETS

ELISA Assay



### TECHNOZYM® VWF:CBA ELISA



#### Associated products

TECHNOZYM® VWF:CBA Calibrator Set

TECHNOZYM® VWF:CBA Control Set

#### Auxiliary reagents

Haematex Collagen Equine Fibrous type I/III

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis. VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb/IIIa.

A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

HPM forms of VWF preferentially bind to collagen than low molecular weight forms.

The binding capacity of VWF to collagen serves as a parameter to determine the adhesive properties of VWF thus reflecting its physiological properties. A decrease in collagen binding can be due to :

- a decrease in the rate of VWF (type 1 and type 3 VWD)
- an absence of HPM multimer (type 2A and 2B VWD) : a rare specific deficiency in collagen binding is classified as type 2M.

Reference	Presentation	Number of tests
4-5450301	Kit	12 x 8

**ELISA kit for the determination of Von Willebrand factor based on its capacity for binding to type III collagen.**

The TECHNOZYM® VWF: CBA ELISA allows the antigenic determination of Von Willebrand factor in human plasma by ELISA method.

#### Components

- 12 breakable ELISA strips (12 x 8 wells coated with type III collagen)
- 2 adhesives for ELISA plate 1 vial x conjugated antibody (0.3 mL)
- 1 vial x TMB chromogen (12 mL)
- 1 bottle x stop solution (12 mL)
- 1 vial x wash buffer concentrate (100 mL)
- 1 vial x incubation buffer (100 mL)
- 5 vials x freeze-dried calibrators
- 1 vial x lyophilized low control plasma
- 1 vial x lyophilized high control plasma

#### Advantages

- Stability 6 months after opening.
- Reaction time 60 minutes.
- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates. (Specialized hemostasis).
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Sensitivity : 0 - 1.7 IU / mL
- Detection limit : 0.01 IU / mL



# VON WILLEBRAND FACTOR

## VWF : COLLAGEN BINDING ASSAYS

ELISA CALIBRATORS

ELISA Assay



### TECHNOZYM® VWF:CBA Calibrator Set



#### Associated products

TECHNOZYM® VWF:CBA Control Set

TECHNOZYM® VWF:CBA ELISA Collagen Type I

TECHNOZYM® VWF:CBA ELISA Collagen Type VI

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis. VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb/IIIa. A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

The high molecular weight forms of VWF preferentially bind to collagen than the low molecular weight forms.

The binding capacity of VWF to collagen serves as a parameter to determine the adhesive properties of VWF thus reflecting its physiological properties.

A decrease in collagen binding can be due to :

- a decrease in the rate of VWF (type 1 and type 3 VWD)
- an absence of HPM multimer (type 2A and 2B VWD) : a rare specific deficiency in collagen binding is classified as type 2M.

Reference	Presentation	Format
4-5450310	Vial	5 x 0.5 mL

#### Calibration plasmas for the antigenic assay by ELISA of von Willebrand factor.

A range of 5 additional calibrators for the ELISA TECHNOZYM® VWF : CBA kit.



#### Components

- 5 vials x 0.5 mL lyophilized plasma

#### Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates. (Specialized hemostasis).
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Sensitivity : 0 - 1.7 IU / mL
- Detection limit : 0.01 IU / mL

# VON WILLEBRAND FACTOR

## VWF : COLLAGEN BINDING ASSAYS

ELISA SETS

ELISA Assay



### TECHNOZYM® VWF:CBA ELISA Collagen Type I



#### Associated products

TECHNOZYM® VWF:CBA Control Set

TECHNOZYM® VWF:CBA ELISA Collagen Type VI

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis. VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa. A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

HPM forms of VWF preferentially bind to collagen than low molecular weight forms.

The binding capacity of VWF to collagen serves as a parameter to determine the adhesive properties of VWF thus reflecting its physiological properties.

A decrease in collagen binding can be due to :

- a decrease in the rate of VWF (type 1 and type 3 VWD)
- an absence of HPM multimer (type 2A and 2B VWD) : a rare specific deficiency in collagen binding is classified as type 2M.

Reference	Presentation	Number of tests
4-5450311	Kit	12 x 8

**ELISA kit for the determination of Von Willebrand factor based on its capacity to bind to type I collagen.**

TECHNOZYM® VWF: CBA ELISA Collagen Type I allows the antigenic determination of Von Willebrand factor in human plasma by ELISA method.

#### Components

- 12 breakable ELISA strips of 8 wells coated with type I collagen
- 1 vial x conjugated antibody concentrate (0.3 mL)
- 1 vial x TMB chromogen (12 mL)
- 1 bottle x stop solution (12 mL)
- 1 vial x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL)
- 5 vials x freeze-dried calibrators
- 1 vial x lyophilized low control plasma
- 1 vial x lyophilized high control plasma
- 2 adhesives for ELISA plate

#### Advantages

- Stability 6 months after opening.
- Reaction time 60 minutes.
- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates. (Specialized hemostasis)
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Sensitivity : 0 - 1.3 IU / mL





# VON WILLEBRAND FACTOR

## VWF : COLLAGEN BINDING ASSAYS

ELISA CONTROLS

ELISA Assay



### TECHNOZYM® VWF:CBA Control Set



#### Associated products

TECHNOZYM® VWF:CBA Calibrator Set

TECHNOZYM® VWF:CBA ELISA Collagen Type I

TECHNOZYM® VWF:CBA ELISA Collagen Type VI

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis. VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa.

A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary.

VWF assay is needed to determine the type of disease.

The high molecular weight forms of VWF preferentially bind to collagen than the low molecular weight forms.

The binding capacity of VWF to collagen serves as a parameter to determine the adhesive properties of VWF thus reflecting its physiological properties.

A decrease in collagen binding can be due to :

- a decrease in the rate of VWF (type 1 and type 3)
- an absence of HPM multimer (type 2A and 2B) : a rare specific deficiency in collagen binding is classified as type 2M.

Reference	Presentation	Format
4-5450312	Vial	5 x 0.5 mL

#### Control plasma for the determination of von Willebrand factor.

Additional high and low controls for the ELISA TECHNOZYM® VWF: CBA kit.



#### Components

- 5 vials x 0.5 mL lyophilized plasma

#### Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates.
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Sensitivity : 0 - 1.3 IU / mL

# VON WILLEBRAND FACTOR

## VWF : COLLAGEN BINDING ASSAYS

ELISA SETS

ELISA Assay



### TECHNOZYM® VWF:CBA ELISA Collagen Type VI



#### Associated products

TECHNOZYM® VWF:CBA Control Set

TECHNOZYM® VWF:CBA ELISA Collagen Type I

#### Informations

VWF is a multimeric high molecular weight (HPM) glycoprotein involved in primary hemostasis. VWF protects FVIII from degradation and transports it to plasma, and mediates platelet activation by binding to their membrane receptors GPIb and GPIIb / IIIa. A quantitative or qualitative defect of VWF causes hemorrhagic pathologies which can be acquired or hereditary. VWF assay is needed to determine the type of disease.

HPM forms of VWF preferentially bind to collagen than low molecular weight forms.

The binding capacity of VWF to collagen serves as a parameter to determine the adhesive properties of VWF thus reflecting its physiological properties.

A decrease in collagen binding can be due to :

- a decrease in the rate of VWF (type 1 and type 3 VWD)
- an absence of HPM multimer (type 2A and 2B VWD) : a rare specific deficiency in collagen binding is classified as type 2M.

Reference	Presentation	Number of tests
4-5450321	Kit	12 x 8

**ELISA kit for the determination of Von Willebrand factor based on its capacity of binding to type VI collagen.**

TECHNOZYM® VWF : CBA ELISA Collagen Type VI allows the antigenic determination of Von Willebrand factor in human plasma by ELISA method.

#### Components

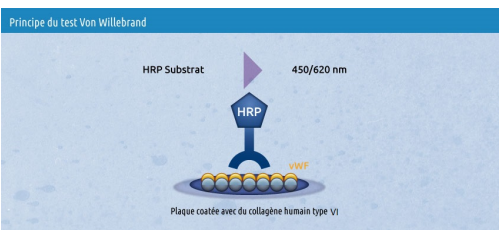
- 12 breakable ELISA strips (12 x 8 wells coated with type VI collagen)
- 2 adhesives for ELISA plate
- 1 vial x conjugated antibody concentrate (0.3 mL)
- 1 vial x TMB chromogen (12 mL)
- 1 bottle x stop solution (12 mL)
- 1 vial x incubation buffer (90 mL)
- 5 vials x freeze-dried calibrators
- 1 vial x lyophilized low control plasma
- 1 vial x lyophilized high control plasma

#### Advantages

- Better reproducibility.
- Better sensitivity.
- Better correlation with the HPM forms of VWF.
- Better sensitivity in detecting low amounts of VWF in severe type 1 deficiency.

#### Characteristics

- Reflects the physiological activity of VWF in plasma and concentrates.
- Marker of response to DDAVP.
- Detects high concentrations of VWF from HPM in PTT (Thrombotic Thrombocytopenic Purpura).
- Detects low concentrations of low molecular weight VWF in TE (Essential Thrombocythemia).
- Allows the identification of samples with a proven deficit of VWF multimers using a polyclonal antibody and the ability of VWF to bind to type VI collagen. (Specialized hemostasis).
- Sensitivity : 0 - 1.3 IU / mL



## FIBRINOLYSIS

## FIBRONECTIN, VITRONECTIN

ELISA SETS

ELISA Assay



## TECHNOZYM® FIBRONECTIN ELISA Kit



Reference	Presentation	Number of tests
4-TC12030	Kit	12 x 8

## Informations

Fibronectin is a glycoprotein that exists in soluble form in plasma or in fibrillar form in the extracellular matrix. This protein modulates the interactions between cells and the extracellular matrix.

In the absence of fibrinogen, fibronectin controls coagulation.

Fibronectin can bind to fibrin to strengthen clots and make them more stable. Fibronectin has shown roles in platelet function, fibrinolysis, chemotaxis, phagocytosis, and opsonization.

In certain pathologies such as trauma, sepsis, liver disorders, the fibronectin level may be low. Conversely, some cancers can have high fibronectin levels.

## ELISA kit for the antigenic assay of Fibronectin.

The Technozym® Fibronectin ELISA kit allows the antigenic detection of intact and uncleaved fibronectin (FN) in human plasma.

## Components

- 12 strips of 8 wells coated with anti-FN monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-FN monoclonal antibody coupled to peroxidase (POX)
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (15 mL)
- 3 vials x 2.5x concentrated dilution buffer (20 mL)
- 1 vial x Wash Buffer Concentrate 12.5 x (20 mL)
- 1 vial x lyophilized calibrator plasma

## Characteristics

The test is based on the quantification of fibronectin using 2 anti-FN monoclonal antibodies. The first to bind fibronectin and the second coupled to peroxidase for detection. (Specialized hemostasis)

- Stability 2 months after opening.
- Reaction time 120 minutes.
- Sensitivity of the assay ranging from 0 to 2 µg / mL of fibronectin.



## FIBRINOLYSIS

## FIBRONECTIN, VITRONECTIN

ELISA SETS

ELISA Assay



## TECHNOZYM® VITRONECTIN ELISA Kit



Reference	Presentation	Number of tests
4-TC12120	Kit	12 x 8

## Informations

Vitronectin (Vn) is an adhesive glycoprotein, synthesized by the liver, released in plasma and present in the extracellular matrix. Vn binds PAI-1. This complex fully activates PAI-1, unlike PAI-1 in solution, where it does not appear to be stable and inactive.

Vn therefore seems to regulate the enzymatic specificity of PAI-1, by stabilizing it. Decreased Vn levels occur in DICs and liver disease (cirrhosis). Vn deposition is associated with atherosclerotic lesions.

## ELISA kit for the antigenic assay of Vitronectin.

The Technozym® Vitronectin ELISA kit allows the detection of vitronectin in plasma.

## Components

- 12 breakable ELISA strips (12 x 8 wells)
- 2 adhesives for ELISA plate
- 1 vial x conjugated antibody-POX
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (15 mL)
- 1 vial x 2.5x concentrated dilution buffer (20 mL)
- 1 vial x POX dilution buffer (12 mL)
- 1 vial x 12.5x wash buffer concentrate (20 mL)
- 1 vial x lyophilized calibrator plasma

## Characteristics

The test is based on the quantification of vitronectin using 2 antibodies; the first monoclonal to bind Vn and the second polyclonal coupled to POX for detection. (Specialized hemostasis)

- Stability 3 months after opening.
- Reaction time 240 minutes.
- Dosage sensitivity ranging from 0 to 400% vitronectin.



# FIBRINOLYSIS

## GLU-PLASMINOGEN, D-DIMERS

ELISA SETS

ELISA Assay



### TECHNOZYM® D-DIMER ELISA Kit



#### Associated products

TECHNOLEIA® D-Dimer LATEX KIT

TECHNOLEIA® D-Dimer Calibrator 0 ng/mL

TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL

TECHNOLEIA® D-Dimer Control High

TECHNOLEIA® D-Dimer Control Low

Reference

4-2599006

Presentation

Kit

Number of tests

12 x 8

#### ELISA kit for the antigenic assay of D-Dimers.

The Technozym® D-Dimer ELISA can be used to determine the concentration of D-Dimers in plasma.



#### Informations

D-Dimers are soluble products resulting from fibrinolysis. Elevated levels of D-dimers are found in disseminated intravascular coagulation, acute venous thrombosis, and pulmonary embolism.

However, other circumstances can lead to elevated D-Dimer levels such as age, pregnancy, cancer, liver damage, and some cases of infection.

The ELISA assay has greater sensitivity when compared with turbidimetric aggregation assays with latex beads, thereby refining the diagnosis by excluding the risk of venous thromboembolism.

#### Components

- 12 breakable strips of 8 wells coated with anti-D-Dimer monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-D-Dimer antibody coupled to peroxidase (POX) 0.3 mL
- 1 vial x 12 mL TMB chromogenic substrate
- 1 bottle x 12 mL stop solution
- 1 vial x washing buffer concentrate 80 mL
- 1 vial x incubation buffer 90 mL
- 5 vials x lyophilized calibrator plasma
- 1 vial x lyophilized low control plasma
- 1 vial x lyophilized high control plasma

#### Characteristics

- Stability 6 months after opening.
- Reaction time 130 minutes.
- Standardized against the international standard.
- Dosage sensitivity ranging from 0 - 1 µg / mL



## FIBRINOLYSIS

## GLU-PLASMINOGEN, D-DIMERS

ELISA SETS

ELISA Assay



## TECHNOZYM® Glu-Plasminogen ELISA Kit



Reference	Presentation	Number of tests
4-TC12040	Kit	12 x 8

## Informations

Plasminogen is the inactive precursor of plasmin, the enzyme responsible for fibrinolysis. plasminogen is synthesized by the liver as a 92 kDa single chain glycoprotein.

Its plasma concentration is approximately 220 µg / mL with a half-life of 2.2 days. Plasminogen activator transforms it into plasmin. The level of fibrinogen is a critical factor influencing the rate of fibrinolysis in vivo.

## ELISA kit for the antigenic assay of Glu-Plasminogen.

The Glu-Plasminogen ELISA kit allows the antigenic detection of Glu-Plasminogen in plasma.



## Components

- 12 x 8-well breakable ELISA strips coated with an anti-plasminogen monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-plasminogen monoclonal antibody coupled to peroxidase (POX) 0.3 mL
- 1 vial x 12 mL TMB chromogenic substrate
- 1 bottle x 12 mL stop solution
- 1 vial x washing buffer concentrate 80 mL
- 1 vial x incubation buffer 90 mL
- 1 vial x lyophilized calibrator plasma

## Characteristics

- The measurement is based on the use of a monoclonal antibody directed against glu-plasminogen. A second anti-plasminogen monoclonal antibody coupled to peroxidase makes it possible to quantify glu-plasminogen in the sample. (Specialized hemostasis)
- Stability 6 months after opening.
  - Reaction time 200 minutes.
  - Sensitivity of the assay ranging from 0.06 to 0.5 µg / mL for Glu-Plasminogen.
  - Unaffected by the presence of PAP complexes or plasmin obtained from lys-plasminogen.



# FIBRINOLYSIS

## TISSUE PLASMINOGEN ACTIVATOR

### ANTIGEN

ELISA CALIBRATORS

ELISA Assay



## TECHNOZYM® t-PA Calibrator Set



### Associated products

TECHNOZYM® t-PA Ag EDTA ELISA

TECHNOZYM® t-PA Control Set

### Informations

Tissue plasminogen activator (t-PA) is a protein involved in breaking down the blood clot. It is a serine protease found in the endothelial cells that line the blood vessels.

Like any enzyme, it converts plasminogen into plasmin, the main blood clot lysis enzyme.

Due to its lysis activity, t-PA is used in clinical medicine to treat cerebral embolism and thrombosis.

Its use is contraindicated in cases of cerebral hemorrhage or head trauma.

Reference	Presentation	Format
4-TC12001	Vial	5 x 0.5 mL

### Additional calibration plasmas for the antigenic assay of t-PA.

A range of 5 additional calibrators for the TECHNOZYM® t-PA antigen kit.

### Components

- 5 vials x 0.5 mL lyophilized plasma

### Characteristics

Stability 6 months at -20 °C The WHO International Standard for Tissue Plasminogen Activator (t-PA) was used as a reference.



# FIBRINOLYSIS

## TISSUE PLASMINOGEN ACTIVATOR

### ANTIGEN

ELISA CONTROLS

ELISA Assay



## TECHNOZYM® t-PA Control Set



### Associated products

TECHNOZYM® t-PA Ag EDTA ELISA

TECHNOZYM® t-PA Calibrator Set

### Informations

Tissue plasminogen activator (t-PA) is a protein involved in breaking down the blood clot. It is a serine protease found in the endothelial cells that line the blood vessels.

Like any enzyme, it converts plasminogen into plasmin, the main blood clot lysis enzyme. Due to its lysis activity, t-PA is used in clinical medicine to treat cerebral embolism and thrombosis. Its use is contraindicated in cases of cerebral hemorrhage or head trauma.

Reference	Presentation	Format
4-TC12003	Vial	2 x 0.5 mL

### Additional control plasmas for the antigenic assay of t-PA.

Additional quality controls for TECHNOZYM® t-PA antigen.

### Components

- 2 vials x 0.5 mL lyophilized plasma

### Characteristics

Stability 6 months at -20 °C





# FIBRINOLYSIS

## TISSUE PLASMINOGEN ACTIVATOR

### ANTIGEN

ELISA SETS

ELISA Assay



## TECHNOZYM® t-PA Ag EDTA ELISA



### Associated products

TECHNOZYM® t-PA Calibrator Set

TECHNOZYM® t-PA Control Set

### Informations

Tissue plasminogen activator (t-PA) is a protein involved in breaking down the blood clot. It is a serine protease found in the endothelial cells that line the blood vessels.

Like any enzyme, it converts plasminogen into plasmin, the main blood clot lysis enzyme.

Due to its lysis activity, t-PA is used in clinical medicine to treat cerebral embolism and thrombosis.

Its use is contraindicated in cases of cerebral hemorrhage or head trauma.

Reference	Presentation	Number of tests
4-TC12007	Kit	12 x 8

### ELISA kit for the antigenic assay of t-PA.

The TECHNOZYM® t-PA Antigen EDTA ELISA kit allows the detection of tissue plasminogen activator (t-PA) antigen in patients with thrombotic disorders, sepsis and cancer.

### Components

- 12 breakable strips of 8 wells coated with an anti-t-PA monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-t-PA monoclonal antibody coupled to peroxidase (POX), 0.3mL
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (12 mL)
- 1 vial x wash buffer concentrate (80 mL)
- 1 vial x incubation buffer (90 mL)
- 1 vial x sample dilution buffer (20 mL)
- 5 vials x freeze-dried calibrators
- 1 vial x lyophilized high control plasma
- 1 vial x lyophilized low control plasma

### Characteristics

The assay can be performed on citrate, EDTA or CTAD. The ELISA method uses 2 monoclonal antibodies.

The system detects both complexed and uncomplexed t-PA from a cutoff of 1 ng / mL.

- Stability 2 months after opening.
- Reaction time 140 minutes.
- The use of EDTA increases the DO signal.
- Sensitivity of the assay ranging from 0 to 30 ng / mL for t-PA.



## FIBRINOLYSIS

## TISSUE PLASMINOGEN ACTIVATOR

## t-PA ANTIGEN

ELISA SETS

ELISA Assay



## TECHNOZYM® t-PA Combi Actibind® ELISA Kit



Reference	Presentation	Number of tests
4-TC16000	Kit	12 x 8

## Informations

Tissue plasminogen activator (t-PA) is a protein involved in breaking down the blood clot. It is a serine protease found in the endothelial cells that line the blood vessels.

Like any enzyme, it converts plasminogen into plasmin, the main blood clot lysis enzyme. Due to its lysis activity, t-PA is used in clinical medicine to treat cerebral embolism and thrombosis.

Its use is contraindicated in cases of cerebral hemorrhage or head trauma.

## ELISA kit for antigen assay and t-PA activity.

The actibind® ELISA combi t-PA kit enables antigenic and t-PA activity detection using antibodies that do not interfere with functional t-PA.

## Components

- 12 strips of 8 breakable wells, coated with anti-t-PA monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-t-PA antibody coupled to peroxidase (POX), 0.3mL
- 1 vial x incubation buffer (90 mL)
- 1 vial x wash buffer (80 mL)
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (15 mL)
- 1 vial x dilution buffer (20 mL)
- 1 vial x a mixture for the detection of plasminogen activator coupled to pNa
- 1 vial x recombinant t-PA calibrator

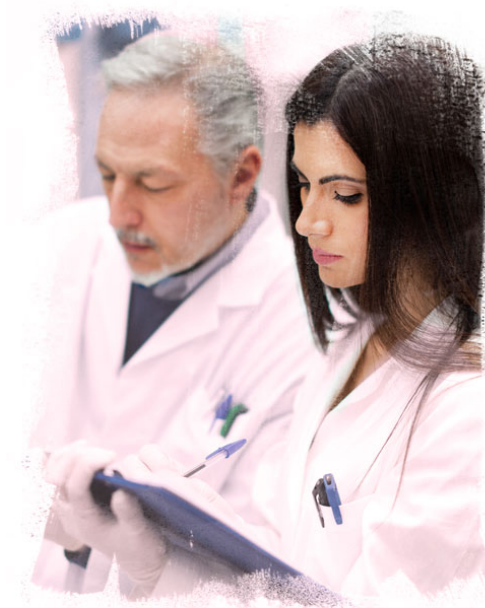
## Characteristics

The bound t-PA converts glu-plasminogen into plasmin which causes, with the substrate, a release of a colored product, the concentration of which is proportional to the quantity of active t-PA. After washing, the t-PA remains bound to the wells and incubation with the anti-t-PA monoclonal antibody coupled to POX will recognize the active and inactive forms of t-PA.

POX will give the substrate a colored compound whose concentration is proportional to the total amount of t-PA.

T-PA activity : 0.05-10 IU / mL

Antigenic : 0.1 to 20 ng / mL



## FIBRINOLYSIS

## TISSUE PLASMINOGEN ACTIVATOR

## t-PA – PAI-1 COMPLEX

ELISA SETS

ELISA Assay



## TECHNOZYM® t-PA-PAI-1 Complex ELISA



Reference	Presentation	Number of tests
4-TC12080	Kit	12 x 8

## Informations

Tissue plasminogen activator (t-PA) is a protein involved in breaking down the blood clot. It is a serine protease found in the endothelial cells that line the blood vessels.

Like any enzyme, it converts plasminogen into plasmin, the main blood clot lysis enzyme. In order to understand how fibrinolysis is regulated in patients, it is necessary to know the circulating concentration of active t-PA, active PAI-1 and t-PA / PAI-1 complexes.

## ELISA kit for the antigenic assay of the t-PA-PAI-1 complex.

The tPA-PAI-1 Complex ELISA kit allows antigenic detection of the t-PA / PAI-1 complex.



## Components

- 12 breakable ELISA strips (12 x 8 wells coated with anti-t-PA monoclonal antibody)
- 2 adhesives for ELISA plate
- 1 vial x anti-PAI-1 monoclonal antibody coupled to peroxidase (POX)
- 1 vial x dilution buffer (20 mL)
- 1 vial x POX dilution buffer (12 mL)
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (15 mL)
- 1 vial x wash buffer (20 mL)
- 1 vial x t-PA / PAI-1 Complex Calibrator

## Characteristics

The measurement is based on the use of a monoclonal antibody that will bind t-PA or t-PA / PAI-1 complexes at the bottom of the well. A second anti-PAI-1 monoclonal antibody coupled to peroxidase makes it possible to measure the t-PA / PAI-1 complex. Only the complexes are quantified, sensitivity from 0 to 20 ng / mL.



## FIBRINOLYSIS

## UROKINASE PLASMINOGEN ACTIVATOR

ELISA SETS

ELISA Assay



## TECHNOZYM® u-PA ELISA Kit



## Associated products

TECHNOZYM® u-PA Combi Actbind® ELISA Kit

## Informations

Belonging to the serine protease family, u-PA activates plasminogen to convert it into plasmin, an enzyme allowing the degradation of fibrin.

It intervenes in the phases of dissolution of the clot during fibrinolysis.

It has also been shown to increase the amount of u-PA in some tumors.

Reference	Presentation	Number of tests
4-TC12010	Kit	12 x 8

**ELISA kit for the antigenic assay of u-PA (urokinase Plasminogen Activator).**

The Technozym® u-PA ELISA kit allows the quantitative antigenic detection of u-PA in human plasma and cell and tissue extracts such as tumors.

## Components

- 12 x 8-well breakable ELISA strips coated with anti-u-PA monoclonal antibody
- 1 vial x biotinylated anti-u-PA polyclonal antibody
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 vial x streptavidin-coupled peroxidase (POX) solution
- 1 vial x dilution concentrate 2.5 x
- 1 vial x dilution buffer (POX)
- 1 bottle x stop solution (15 mL)
- 1 vial x wash buffer (80 mL)
- 1 vial x u-PA calibrator

## Characteristics

The measurement is based on the u-PA binding to the bottom of the wells thanks to the anti-u-PA monoclonal antibody, the u-PA will be revealed by a biotinylated anti-u-PA polyclonal antibody which will be detected with streptavidin-HRP and hydrolysis of TMB by HRP will give a stain whose absorbance will be read at 450 nm. Both single and double urokinase chains are detected. (Specialized hemostasis)

- Stability 6 months after opening.
- Reaction time 200 minutes.
- A calibrator calibrated against NIBSC 87/594 included.
- Sensitivity between 0.6 to 10 ng / mL.



## FIBRINOLYSIS

## UROKINASE PLASMINOGEN ACTIVATOR

ELISA SETS

ELISA Assay



# TECHNOZYM® u-PA Combi Actibind® ELISA Kit



## Associated products

TECHNOZYM® u-PA ELISA Kit

## Informations

Belonging to the serine protease family, u-PA activates plasminogen to convert it into plasmin, an enzyme allowing the degradation of fibrin. It intervenes in the phases of dissolution of the clot during fibrinolysis.

Reference	Presentation	Number of tests
4-TC16010	Kit	12 x 8

### ELISA kit for antigen assay and u-PA (urokinase Plasminogen Activator) activity.

The Technozym® u-PA Combi Actibind® ELISA kit allows antigen detection and u-PA activity using coated antibodies that do not interfere with the functional u-PA to be assayed.

## Components

- 12 x 8-well breakable ELISA strips coated with monoclonal anti-u-PA antibody
- 1 vial x biotinylated human u-PA polyclonal antibody
- 1 vial x TMB chromogenic substrate (12 mL)
- 1 bottle x stop solution (15 mL)
- 1 vial x dilution buffer (20 mL)
- 1 vial x POX dilution buffer (12 mL)
- 1 vial x wash buffer (80 mL)
- 1 vial x detection dilution buffer (20 mL)
- 1 vial x lyophilized u-PA calibrator
- 1 vial x streptavidin peroxidase (POX) solution
- 1 vial x plasminogen activator detection

## Characteristics

First, the functional u-PA assay is performed using Glu-plasminogen and a low molecular weight plasmin substrate. Secondly, the ELISA plate is washed and then a monoclonal antibody specific to u-PA, recognizing free u-PAs and complexed with inhibitors, is used. It is revealed by peroxidase. (Specialized hemostasis)

- Stability 3 months after opening.
- Reaction time 160 minutes then 140 minutes.
- Antigen : sensitivity of the assay ranging from 0 to 10 ng / mL u-PA.
- Activity : sensitivity of the assay ranging from 0 to 1 U / mL of u-PA.



## FIBRINOLYSIS

## PLASMIN ANTIPLASMIN COMPLEX

ELISA SETS

ELISA Assay



## TECHNOZYM® PAP Complex ELISA Kit



## Associated products

TECHNOZYM® PAP Calibrator Set

TECHNOZYM® PAP Control Set

## Informations

Plasmin is the main enzyme in fibrinolysis, which breaks down fibrin.

Alpha-2-antiplasmin is an inhibitor of serine proteases, mainly plasmin. It plays an important role in the regulation of fibrinolysis. A decrease in the amount of alpha-2-antiplasmin can lead to bleeding syndromes.

Alpha-2-antiplasmin reacts rapidly to plasmin to form a PAP complex. An increase in the formation of the PAP complex is accompanied by an increase in the formation of fibrin and an increase in the level of reactive plasmin. There is a correlation between the level of fibrin fragment and the level of PAP complex.

Reference	Presentation	Number of tests
4-TC12060	Kit	12 x 8

## ELISA kit for the antigenic assay of the PAP complex.

The TECHNOZYM® PAP Complex ELISA kit allows the detection of plasmin / alpha-2-antiplasmin complexes in human plasma. High levels of this complex can occur in thrombotic events, hyperfibrinolysis or in thrombolytic therapies.

## Components

- 12 breakable strips of 8 wells coated with anti-PAP monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-plasminogen antibody coupled to peroxidase, 0.3mL
- 1 bottle x 12 mL stop solution
- 2 vials x 20 mL wash buffer concentrate
- 1 vial x concentrated dilution 20 mL
- 5 vials x freeze-dried 0.5 mL calibrator
- 1 lyophilized low control vial
- 1 lyophilized top control vial

## Characteristics

- The measurement is based on the use of a monoclonal antibody directed only to a specific epitope of the PAP complex. The antibody therefore does not recognize free  $\alpha$ 2-antiplasmin or free plasminogen.
- A second anti-Glu-plasminogen monoclonal antibody coupled to peroxidase makes it possible to measure Glu-plasminogen. (Specialized hemostasis)
- Stability 3 months after opening.
  - Reaction time 150 minutes.
  - Sensitivity of the assay ranging from 0.6 to 225 ng / mL of PAP complexes.



# FIBRINOLYSIS

## PLASMIN ANTIPLASMIN COMPLEX

ELISA CALIBRATORS

ELISA Assay



### TECHNOZYM® PAP Calibrator Set



#### Associated products

TECHNOZYM® PAP Complex ELISA Kit

TECHNOZYM® PAP Control Set

#### Informations

Plasmin is the main enzyme in fibrinolysis, which breaks down fibrin.

Alpha-2-antiplasmin is an inhibitor of serine proteases, mainly plasmin. It plays an important role in the regulation of fibrinolysis. A decrease in the amount of alpha-2-antiplasmin can lead to bleeding syndromes.

Alpha-2-antiplasmin reacts rapidly to plasmin to form a PAP complex. An increase in the formation of the PAP complex is accompanied by an increase in the formation of fibrin and an increase in the level of reactive plasmin.

There is a correlation between the level of fibrin fragment and the level of PAP complex.

Reference	Presentation	Format
4-TC12062	Vial	5 x 0.5 mL

#### Additional calibration plasmas for the antigenic assay of the PAP complex.

A range of 5 additional calibrators for the TECHNOZYM® PAP Complex ELISA Kit.

#### Components

- 5 vials x 0.5 mL lyophilized plasma

#### Characteristics

- Stability 6 months at -20 °C



# FIBRINOLYSIS

## PLASMIN ANTIPLASMIN COMPLEX

ELISA CONTROLS

ELISA Assay



### TECHNOZYM® PAP Control Set



#### Associated products

TECHNOZYM® PAP Calibrator Set

TECHNOZYM® PAP Complex ELISA Kit

#### Informations

Plasmin is the main enzyme in fibrinolysis, which breaks down fibrin.

Alpha-2-antiplasmin is an inhibitor of serine proteases, mainly plasmin. It plays an important role in the regulation of fibrinolysis.

A decrease in the amount of alpha-2-antiplasmin can lead to bleeding syndromes.

Alpha-2-antiplasmin reacts rapidly to plasmin to form a PAP complex. An increase in the formation of the PAP complex is accompanied by an increase in the formation of fibrin and an increase in the level of reactive plasmin. There is a correlation between the level of fibrin fragment and the level of PAP complex.

Reference	Presentation	Format
4-TC12064	Vial	2 x 0.5 mL

**Additional control plasmas for the antigenic assay of the PAP complex.**

Additional quality controls for the TECHNOZYM® PAP Complex ELISA Kit.

#### Components

- 2 vials x 0.5 mL lyophilized plasma

#### Characteristics

- Stability 6 months at -20 °C





## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA SETS

ELISA Assay



## IMUBIND® Tissue PAI-1 ELISA



## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Plasminogen is activated by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, it controls the degradation of fibrinous thrombus. A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Number of tests
11-821	Kit	96

**The IMUBIND® Tissue PAI-1 ELISA Kit is an enzyme immunoassay for the determination of human PAI-1 in tissue extracts and cell culture supernatants.**

## Components

- 96 microwells coated with anti-human PAI-1 IgG
- 2 vials x biotinylated human anti-PAI-1 antibody, lyophilized
- 1 vial x substrate, TMB, 11 mL
- 1 bottle x detergent, 25% Triton X-100, 12 mL
- 2 sachets x PBS buffer, pH 7.4
- 1 vial x streptavidin-HRP, 60 µL
- 1 vial x lyophilized enzyme conjugate diluent
- 6 PAI-1 standard vials, lyophilized

## Advantages

The test detects latent (inactive) and active forms of PAI-1 complexes and remains insensitive to PAI-2.



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA SETS

ELISA Assay



## TECHNOZYM® PAI-1 Antigen ELISA Kit



## Associated products

TECHNOZYM® PAI-1 Antigen Calibrator Set

TECHNOZYM® PAI-1 Antigen Control Set

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus.

A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Number of tests
4-TC12075	Kit	12 x 8

## ELISA kit for the assay of PAI-1 antigen.

The Technozym® PAI-1 Antigen ELISA kit allows the quantitative antigen detection of PAI-1 in human plasma. Acidified citrated plasmas, CTAD or EDTA can be used.

## Components

- 12 strips of 8 wells coated with anti-PAI-1 monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-PAI-1 monoclonal antibody coupled to peroxidase (POX)
- 1 vial x 12 mL TMB chromogenic substrate
- 1 bottle x 12 mL stop solution
- 1 vial x washing buffer concentrate 80 mL
- 1 vial x incubation buffer 90 mL
- 5 vials x freeze-dried calibrator
- 1 lyophilized low control vial
- 1 lyophilized top control vial

## Characteristics

- Stability 3 months after opening
- Reaction time 130 minutes
- Standardized against the international standard 87/512
- Antigen : Sensitivity of the assay ranging from 4 to 100 ng / mL
- Detection limit 0.5 ng / mL



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA CALIBRATORS

ELISA Assay



## TECHNOZYM® PAI-1 Antigen Calibrator Set



## Associated products

TECHNOZYM® PAI-1 Antigen Control Set

TECHNOZYM® PAI-1 Antigen ELISA Kit

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus.

A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Format
4-TC12077	Vial	5 x 0.5 mL

## Additional calibration plasmas for the antigenic assay of PAI-1.

A range of 5 additional calibrators for the TECHNOZYM® PAI-1 Antigen ELISA Kit.

## Components

- 5 vials x 0.5 mL lyophilized plasma

## Characteristics

- Stability 6 months at -20 °C
- Antigen : Sensitivity of the TECHNOZYM® PAI-1 assay Antigen ELISA Kit ranging from 4 to 100 ng / mL
- Detection limit : 0.5 ng / mL



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA CONTROLS

ELISA Assay



## TECHNOZYM® PAI-1 Antigen Control Set



## Associated products

TECHNOZYM® PAI-1 Antigen Calibrator Set

TECHNOZYM® PAI-1 Antigen ELISA Kit

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus.

A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Format
4-TC12079	Vial	2 x 0.5 mL

## Additional control plasmas for the antigenic assay of PAI-1.

Additional quality controls for the TECHNOZYM® PAI-1 Antigen ELISA Kit.

## Components

- 2 vials x 0.5 mL of control plasmas

## Characteristics

- Stability 6 months at -20 °C
- Antigen : Sensitivity of the TECHNOZYM® PAI-1 assay
- Antigen ELISA Kit ranging from 4 to 100 ng / mL
- Detection limit : 0.5 ng / mL



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA SETS

ELISA Assay



## TECHNOZYM® PAI-1 Actibind® ELISA Kit



## Associated products

TECHNOZYM® PAI-1 Actibind® Calibrator Set

TECHNOZYM® PAI-1 Actibind® Control Set

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus.

A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Number of tests
4-TC16075	Kit	12 x 8

**ELISA kit for the antigenic assay of the active form of PAI-1.**

The Technozym® PAI-1 Actibind® ELISA kit allows the antigenic detection of the active form of PAI-1 in human plasma in patients with thrombotic disorders (deep vein thrombosis, myocardial infarction), cancers or sepsis.

## Components

- 12 strips x 8 wells coated with t-PA bound by anti-t-PA monoclonal antibody
- 2 adhesives for ELISA plate
- 1 vial x anti-PAI-1 antibody coupled to peoxidase (POX), 0.3mL
- 1 vial x 12 mL TMB chromogenic substrate
- 1 bottle x 12 mL stop solution
- 1 vial x washing buffer concentrate 80 mL
- 1 vial x incubation buffer 90 mL
- 5 vials x 0.2 mL lyophilized calibrator plasma
- 1 vial x 0.2 mL lyophilized low control plasma
- 1 vial x 0.2 mL lyophilized top control plasma

## Characteristics

Acidified citrated plasmas, CTAD or EDTA can be used. The measurement is based on the immobilization on the plate of active and functional t-PA using an anti-t-PA monoclonal antibody. The active form of PAI-1 binds to t-PA. There is no interference from PAI-2 (5 U / mL) and PAI-3 (5.5 µg / mL). A second anti-PAI-1 monoclonal antibody coupled to peroxidase makes it possible to measure PAI-1. (Specialized hemostasis)

- Stability 6 months after opening.
- Reaction time 60 minutes.
- The WHO International Standard for Plasminogen Activator Inhibitor (PAI-1) was used as a reference.
- Dosage from 1 to 85 IU / mL
- Detection limit : 0.8 IU / mL



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA CALIBRATORS

ELISA Assay



## TECHNOZYM® PAI-1 Actibind® Calibrator Set



## Associated products

TECHNOZYM® PAI-1 Actibind® Control Set

TECHNOZYM® PAI-1 Actibind® ELISA Kit

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus. A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Format
4-TC16077	Vial	5 x 0.2 mL

## Additional calibration plasmas for the antigenic assay of the active form of PAI-1.

A range of 5 additional calibrators for the TECHNOZYM® PAI-1 Actibind® ELISA Kit.

## Components

- 5 vials x 0.2 mL lyophilized plasma

## Characteristics

- Stability 6 months at -20 °C
- Stability 6 months at -20 °C
- Antigen : Sensitivity of the TECHNOZYM® PAI-1
- Actibind® ELISA assay Kit ranging from 1 to 85 IU / mL
- Detection limit : 0.8 IU / mL



## FIBRINOLYSIS

## PLASMINOGEN ACTIVATOR INHIBITOR

ELISA CONTROLS

ELISA Assay



## TECHNOZYM® PAI-1 Actibind® Control Set



## Associated products

TECHNOZYM® PAI-1 Actibind® Calibrator Set

TECHNOZYM® PAI-1 Actibind® ELISA Kit

## Informations

Plasminogen activator inhibitor 1 (PAI-1) is a glycoprotein, the primary inhibitor of t-PA and u-PA. It plays an essential role in controlling any excessive activation of fibrinolysis. It is present in plasma associated with vitronectin, in free form or associated with t-PA and in the alpha granules of platelets.

Fibrinolysis corresponds to the solubilization of the fibrinous thrombus by plasmin, an enzyme originating from plasminogen adsorbed to fibrin. Activation of plasminogen takes place by t-PA and u-PA. PAI-1 by inhibiting plasminogen activators, controls the degradation of fibrinous thrombus. A decrease in fibrinolytic activity promotes the occurrence of thrombosis, while excessive fibrinolysis leads to hemorrhages.

Reference	Presentation	Format
4-TC16079	Vial	2 x 0.2 mL

## Additional control plasmas for the antigenic assay of PAI-1.

Additional quality controls for the TECHNOZYM® PAI-1 Actibind® ELISA Kit.

## Components

- 2 vials x 0.2 mL of lyophilized plasma

## Characteristics

- Stability 6 months at -20 °C
- Antigen : Sensitivity of the TECHNOZYM® PAI-1 assay
- Antigen ELISA Kit ranging from 4 to 100 ng / mL
- Detection limit : 0.5 ng / mL



## THROMBIN GENERATION

## TGT (TGA)

REAGENT KITS

Fluorometric assay



## TECHNOTHROMBIN® TGA Kit



## Associated products

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA RD

TECHNOTHROMBIN® TGA SUB

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Number of tests
4-5006010	Kit	3 x 16

## Reagent kit for assay of the Thrombin Generation Test (TGT).

The Technothrombin® TGA kit allows the determination of the thrombin generation test (TGT) in platelet-poor plasma (PPP) or platelet-rich plasma (PRP) through the activation of coagulation by providing negatively charged phospholipids, different concentrations of tissue factor and calcium chloride.

## Components

- 3 vials of TGA substrate (1.5 mL)
- 1 vial of TGA buffer (3 mL)
- 1 vial of TGA thrombin calibrator (0.5 mL)
- 1 vial of low TGA RC reagent: low concentration of phospholipids
- + Recombinant human tissue factor (rhFT) 0.5 mL
- 1 bottle of TGA RC high reagent : high concentration of phospholipids + rhFT 0.5 mL
- 1 vial of TGA RD reagent: phospholipids 1.5 mL
- 2 vials of TGA control (1 CH and 1 CL) : human plasma with increased thrombin generation, CL : human plasma with decreased thrombin generation 2x1 mL

## Characteristics

The method is based on the cleavage of a fluorogenic substrate in real time by thrombin according to different concentrations of phospholipids and FT.

The concentration of thrombin (nM) in plasma can thus be calculated using a calibration curve. The different phases of TGT formation can thus be visualized. The Technothrombin® TGA kit can be used to monitor the entire hemostatic system. Many additional reagents can be purchased in addition. (Specialized hemostasis)





## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA RA



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA RD

TECHNOTHROMBIN® TGA SUB

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006205	Vial	5 x 0.5 mL
4-5006206	Vial	50 x 0.5 mL

## Additional reagent for TGT

Low concentration of phospholipids (micelles) without tissue factor for TGT.

## Components

- 5 or 50 vials x 0.5 mL lyophilized reagent

## Characteristics

- Stability 6 months at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA RB



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA RD

TECHNOTHROMBIN® TGA SUB

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006209	Vial	5 x 0.5 mL
4-5006210	Vial	50 x 0.5 mL

## Additional reagent for TGT

Phospholipids (micelles) containing recombinant human tissue factor (rhFT) in Tris-Hepes-NaCl buffer for TGT.

## Components

- 5 or 50 vials x 0.5 mL lyophilized reagent

## Characteristics

- Stability 6 months at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA RC LOW



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RD

TECHNOTHROMBIN® TGA SUB

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006212	Vial	5 x 0.5 mL
4-5006213	Vial	50 x 0.5 mL

## Additional reagent for TGT

Low concentration of phospholipids (micelles) containing recombinant human tissue factor (rhFT) in Tris-Hepes-NaCl buffer for TGT.

## Components

- 5 or 50 vials x 0.5 mL lyophilized reagent

## Characteristics

- Stability 6 months at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA RC HIGH



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA RD

TECHNOTHROMBIN® TGA SUB

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006214	Vial	5 x 0.5 mL
4-5006216	Vial	50 x 0.5 mL

## Additional reagent for TGT

High concentration of phospholipids (micelles) containing recombinant human tissue factor (rhFT) in Tris-Hepes-NaCl buffer for TGT.

## Components

- 5 or 50 vials x 0.5 mL lyophilized reagent

## Characteristics

Stability 6 months at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA RD



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA SUB

Reference	Presentation	Format
4-5006220	Vial	5 x 2.0 mL
4-5006222	Vial	50 x 2,0 mL

## Phospholipids for TGT

Phospholipids (micelles) in Tris-Hepes-NaCl buffer for TGT.

## Components

- 5 or 50 vials x 2 mL lyophilized reagent

## Characteristics

Stability 6 months at -20 °C



## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.



## THROMBIN GENERATION

## TGT (TGA)

ADDITIONAL REAGENTS

Fluorometric assay



## TECHNOTHROMBIN® TGA SUB



## Associated products

TECHNOTHROMBIN® TGA Kit

TECHNOTHROMBIN® TGA RA

TECHNOTHROMBIN® TGA RB

TECHNOTHROMBIN® TGA RC HIGH

TECHNOTHROMBIN® TGA RC LOW

TECHNOTHROMBIN® TGA RD

Reference	Presentation	Format
4-5006230	Vial	50 x 1.5 mL
4-5006235	Vial	5 x 1.5 mL



## Fluorogenic substrate for TGT

Fluorogenic substrate 1 mM, Z-G-G-R-AMC, 15 mM CaCl<sub>2</sub> for TGT.

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

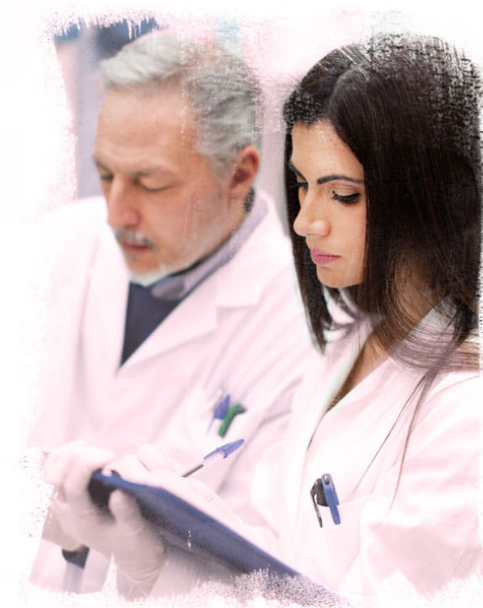
This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

## Components

- 5 or 50 vials x 1.5 mL lyophilized reagent

## Characteristics

Stability 6 months at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

CONTROLS

Fluorometric assay



## TECHNOTHROMBIN® TGA Control High



## Associated products

TECHNOTHROMBIN® TGA Cal Set

TECHNOTHROMBIN® TGA Control Low

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet rich or poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006320	Vial	5 x 1.0 mL

**Additional control plasma for the TGT.**

Additional control plasma for the Thrombin Generation Test (TGT) assay.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

- Lyophilized normal human plasma with increased thrombin generation.
- Stability 1 month at -20 °C



## THROMBIN GENERATION

## TGT (TGA)

CONTROLS

Fluorometric assay



## TECHNOTHROMBIN® TGA Control Low



## Associated products

TECHNOTHROMBIN® TGA Cal Set

TECHNOTHROMBIN® TGA Control High

## Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet-rich or platelet-poor plasma.

This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

Reference	Presentation	Format
4-5006330	Vial	5 x 1.0 mL

**Additional control plasma for the TGT.**

Additional control plasma for the Thrombin Generation Test (TGT) assay.

## Components

- 5 vials x 1 mL lyophilized plasma

## Characteristics

- Lyophilized normal human plasma with decreased thrombin generation.
- Stability 1 month at -20 °C





# THROMBIN GENERATION

## TGT (TGA)

CALIBRATORS

Fluorometric assay



# TECHNOTHROMBIN® TGA Cal Set



### Associated products

TECHNOTHROMBIN® TGA Control High

TECHNOTHROMBIN® TGA Control Low

Reference	Presentation	Format
4-5006345	Vial	1 x 3 mL + 1 x 0.5 mL

**Additional calibration plasmas for the measurement of the Thrombin Generation Test (TGT).**



### Informations

Thrombin Generation Time (TGT) is an overall hemostasis test that measures the time and amount of thrombin generated in platelet-rich or platelet-poor plasma.

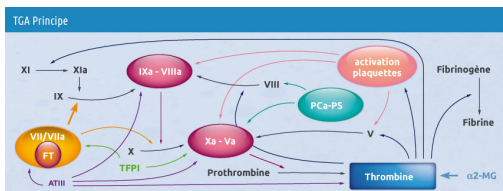
This test covers 4 important parameters which makes it possible to estimate the potential of an individual to generate thrombin and can individualize hyper or hypo-coagulable phenotypes. This test is also used to monitor conventional treatments for hemophilia and when using bypass therapy which is necessary when inhibitors develop in patients.

### Components

- 1 vial x TGA Hepes, NaCl, BSA 0.5% 3 mL buffer
- 1 vial x TGA thrombin calibrator (≈ 1 mM) in 0.5 mL BSA buffer

### Characteristics

Stability 1 month at -20 °C



# AUXILIARY REAGENTS

## NEUTRALIZERS

AUXILIARY REAGENTS

### DOAC-Stop™

Neutralizing



Reference	Presentation	Format	Number of tests
20-HX9904-100	Tablets	1 x 100	100
20-HX9904-50	Tablets	1 x 50	50

#### Informations

The therapeutic uses of NOAC are increasing. NOACs are known to interfere with almost all coagulation tests to varying degrees and sometimes patients who need to be tested for underlying coagulation defects may also be on NOAC.

DOAC-Stop™ is the first general agent available to solve diagnostic problems associated with NOACs. After treatment with DOAC-Stop™, plasma samples can be analyzed for underlying clotting defects such as factor deficiencies, heparin, lupus anticoagulant, or other interfering antibodies.

**Suppresses all types of NOAC, including dabigatran, apixaban, rivaroxaban and edoxaban, with minimal effect on currently known coagulation variables.**

#### Components

- 1 vial of 50 or 100 tablets

#### Advantages

DOAC-Stop is designed for use on citrated plasma. The tablets are dissolved in the citrated plasma, then after centrifugation, the supernatant containing no more DOAC is ready to be used.



## AUXILIARY REAGENTS NEUTRALIZERS

AUXILIARY REAGENTS

Neutralizing



# HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFH



### Associated products

Solution CaCl<sub>2</sub> 25 mM

### Informations

Heparin is widely used in hospitals as an anticoagulant. Unfractionated heparin is usually monitored using TCA and thrombin time tests. Often, plasma samples are not identified as containing heparin and may be present as an unexpected contaminant.

So, the reason for prolonged TCA or KCT testing may not be apparent, and laboratory testing may not be straightforward.

Laboratories may find it useful to have a simple method of confirming the presence of heparin before proceeding with further investigations as needed.

TCA : temps de caphaline activé

KCT : kaolin clotting time

SACT : surface activated clotting time

NaPTT : Nonactivated partial thromboplastin time

Reference	Presentation	Format	Number of tests
20-X9107	Vial	5 x 10 mL	1000

**Solution of calcium chloride CaCl<sub>2</sub> 0.025M which neutralizes the effect of unfractionated heparins UFH on the TCA, KCT, SACT or NAPTT tests.**



### Components

- 5 vials x 10 mL solution of calcium chloride CaCl<sub>2</sub> 0.025M

### Advantages

- Ready-to-use solution  
- HRRS is a simple and unique product that plays an important role in routine testing.

### Characteristics

Heparin Resistant Recalcification Solution (HRRS) containing 0.025 M of calcium salts with polybrene, preservatives, blue marker dye and buffers.

## AUXILIARY REAGENTS NEUTRALIZERS

AUXILIARY REAGENTS

Neutralizing



### DOAC-Stop Liquid™



Reference	Presentation	Format	Number of tests
20-X9905-100	Vial	1 x 2.0 mL	100

#### Informations

The therapeutic uses of NOAC are increasing. NOACs are known to interfere with almost all coagulation tests to varying degrees and sometimes patients who need to be tested for underlying coagulation defects may also be on NOAC.

DOAC-Stop™ is the first general agent available to solve diagnostic problems associated with NOACs. After treatment with DOAC-Stop™, plasma samples can be analyzed for underlying clotting defects such as factor deficiencies, heparin, lupus anticoagulant, or other interfering antibodies.

**An activated charcoal suspension used to remove Direct Oral Anticoagulants (DOACs), including dabigatran, apixaban, rivaroxaban and edoxaban, with minimal effect on currently known coagulation variables.**

#### Components

- 1 glass vial of 2 mL for performing 100 tests

#### Advantages

DOAC-Stop Liquid™ is ready to use. Immediately mixes with plasma. Centrifugation eliminated. Instant dispersion in samples.



## AUXILIARY REAGENTS

BUFFERS, CaCl<sub>2</sub>, BSA

AUXILIARY REAGENTS

Solution CaCl<sub>2</sub> 25 mM

Solutions



## Associated products

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFH

Reference	Presentation	Format
4-5277015	Vial	1 x 100 mL

## Calcium chloride solution of 100 mL

25 mM calcium chloride solution, ready to use for hemostasis testing.



## AUXILIARY REAGENTS

BUFFERS, CaCl<sub>2</sub>, BSA

AUXILIARY REAGENTS

Solution CaCl<sub>2</sub> 50 mM

Solutions



## Associated products

HRRS Solution CaCl<sub>2</sub> 0.025M neutralizing UFH

Reference	Presentation	Format
4-5279025	Vial	1 x 100 mL

## Calcium chloride solution of 100 mL

50 mM calcium chloride solution, ready to use for hemostasis testing.



## AUXILIARY REAGENTS

BUFFERS, CaCl<sub>2</sub>, BSA

AUXILIARY REAGENTS

## Citrate Sodium Chloride Buffer



## Associated products

Reference	Presentation	Format
4-5400045	Vial	1 x 60 mL

**Citrate Sodium Chloride buffer.**

Dilution buffer for use in factor II,V, VII and X tests.



Prionex®



Bovine serum albumin 20%



Imidazole buffer

Solution CaCl<sub>2</sub> 25 mM

## AUXILIARY REAGENTS

BUFFERS, CaCl<sub>2</sub>, BSA

AUXILIARY REAGENTS

## Imidazole buffer

Solutions



Reference	Presentation	Format
4-5410008	Vial	10 x 25 mL
4-5410010	Vial	1 x 50 mL
4-5410012	Vial	1 x 90 mL

Ready-to-use imidazole buffer for plasma dilution for hemostasis tests.

### Characteristics

Composition : Imidazole 50mM, NaCl 0.1M, pH 7.4





## AUXILIARY REAGENTS

BUFFERS, CaCl<sub>2</sub>, BSA

AUXILIARY REAGENTS

## Tris BSA

Solutions



## Associated products



Rox Factor IX



Rox Factor Prothrombin



Rox Factor VIII

Rox Factor XIa

Rox FIX-A

Reference	Presentation	Format
5-TB035	Vial	1 x 50 mL
5-TB035-100	Vial	1 x 100 mL

**Buffer diluent, stock solution, for sensitive proteins such as clotting factors.**

0.5 M Tris pH 7.3 (20°C), 2.0 M NaCl, 10 % Bovine Serum Albumin (BSA).  
Dilute 1 + 9 with water prior to use to obtain buffer working solution.

## Characteristics

BSA : bovine serum albumin

Stock Solution :  
0.5 mol / L Tris-HCl  
pH 7.3 (at 20 °C)  
2 mol / L NaCl 10% BSA



## INSTRUMENTS

## T-TAS®01

## INSTRUMENT

## INSTRUMENTS

## T-TAS® 01

Analyzers



## Associated products

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

## Informations

The formation of the platelet thrombus is a direct indicator of the primary hemostatic capacity of patients.

This test is performed under arterial flow conditions using whole blood samples anti-coagulated with benzylsulfonyl-D-ArgPro-4-amidinobenzylamide (BAPA).

BAPA is an anticoagulant that inhibits thrombin and Factor Xa, which blocks the coagulation cascade and allows the PL Chip test to specifically measure platelet thrombus formation (primary hemostasis).

Reference	Presentation	Format
25-18001	Instrument	1

### Microfluidic chip system (AR, PL and HD Chip) to quantify the thrombus formation process under total blood flow conditions.

The T-TAS® 01 (Total Thrombus formation analysis system) provides a real-time, comprehensive, ex vivo assessment of blood haemostatic capacity.

It is composed of a portable instrument, a dedicated computer and a chip integrating chambers of flow covered with either collagen (PL Chip) to evaluate the primary hemostatic capacity (case of antiplatelet therapies or congenital platelet disorders), a mixture of collagen and thromboplastin to assess primary and secondary hemostatic capacity (risk of bleeding) when platelet count is normal (AR Chip) or (HD Chip) if platelets are between 10,000 and 90,000/ $\mu$ L of blood to assess the risk of bleeding for thrombocytopenia and platelet transfusions.

## Advantages

T-TAS® 01 is conformed with IVD CE marking. Total thrombus formation analysis system for clinical use. Single-use microchip produced by a precision injection molding technique requires only small-volume whole blood samples (approx. 320  $\mu$ l). Simple operation controlled by a dedicated computer system.

## Characteristics

During the test, the blood sample is exposed to arterial shear stresses in the presence of the collagen attached to the surface of the micro-capillary channels, which results in the binding of platelets to collagen in the presence of von Willebrand factor, and therefore the platelet activation. Platelet activation results in the release of endogenous factors that recruit and activate other platelets and cause them to aggregate, or the formation of a platelet thrombus and its development. The formation of a platelet thrombus causes obstruction of the microcapillary channels, which increases the flow pressure within the test. Dimensions : (W x H x D) 320 x 247 x 360 mm Weight : 6.0 kg



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES PL CHIPS

CONSUMABLES FOR DOSAGE

Analyzers



## PL Chip T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-18002	Consumables	1 x 20 units	40

**The PL Chip for T-TAS®01 is the first ex-vivo flow chamber model of in-vivo primary hemostasis available for clinical use.**

PL chip technology uses physiological arterial shear stress to assess platelet thrombus formation (primary hemostasis) in whole blood.

The PL chip is a flow chamber with 26 collagen-coated microcapillaries arranged in parallel. Results are generated within 40 minutes of sample collection, and 2 blood samples can be run on each PL chip.



## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.

## Components

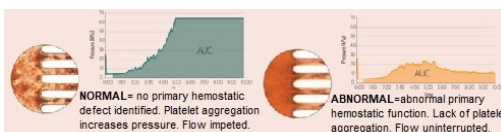
- 1 box x 20 Chips

## Advantages

Each PL Chip has two analytical paths, so it is possible to measure two blood samples with the same test strip. The PL Chip for T-TAS® 01 is a single-use, ready-to-use chip. All reagents required for the test are contained in the test chip.

## Characteristics

Measurements with the T-TAS® 01 system involve evaluation of biological activity and depend on the quality of the blood collection. Blood samples collected for analysis with the PL Chip should only be collected with the BAPA tube specified for T-TAS® 01. The PL Chip for T-TAS® 01 is designed to measure in particular the formation of platelet thrombus on an analytical path consisting of 26 micro-capillary channels and coated with type I collagen.



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES PL CHIPS

CONSUMABLES FOR DOSAGE

Analyzers



## Reservoir set PL Chip T-TAS® 01



## Associated products

T-TAS® 01  
 Barcode Scanner T-TAS® 01  
 HD Chip T-TAS® 01  
 AR & HD Chip Reservoir Set T-TAS® 01  
 AR Chip T-TAS® 01  
 BAPA Tube T-TAS® 01  
 PL Chip T-TAS® 01  
 CaCTI Reagent for AR & HD Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-18003	Consumables	1 x 100 sets	100

## Consumable for T-TAS® 01

Reservoir for receiving approximately 240 µL of whole blood that connects to the PL chip measurement chips.



## Components

- 1 box x 100 tanks

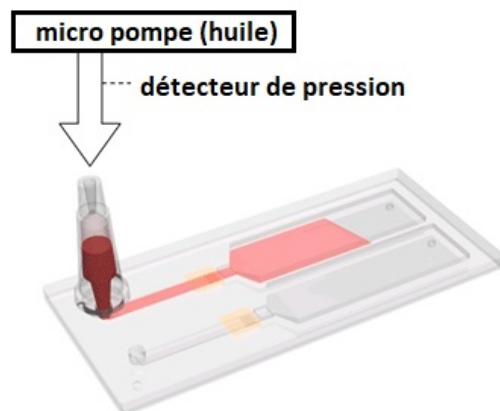
## Characteristics

The PL Chip for T-TAS® 01 is a single-use, ready-to-use chip.  
 All reagents required for the test are contained in the test chip.  
 The PL Chip for T-TAS® 01 is designed to measure in particular the formation of platelet thrombus on an analytical path consisting of 26 micro-capillary channels and coated with type I collagen.

## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is necessary to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, clotting factors and their various inhibitors and activators.



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES PL CHIPS

CONSUMABLES FOR SAMPLING

Analyzers



## BAPA Tube T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

## Informations

Benzylsulfonyl-D-Arg-Pro-4-amidinobenzylamid (BAPA) is a potent synthetic anticoagulant which inhibits Factor Xa and thrombin.

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.

Reference	Presentation	Format
25-18004	Consumables	1 x 50 tubes

**The BAPA Tube for T-TAS® 01 is intended to be used for the collection, transport and storage of blood samples used as part of the T-TAS® 01 System for PL Chip.**

## Components

- 1 box x 50 collection tubes 3 mL

## Characteristics

Measurements with the T-TAS® 01 system involve evaluation of biological activity and depend on the quality of the blood collection.

Blood samples collected for analysis with the PL Chip should only be collected with the BAPA tube specified for T-TAS® 01.

50 tubes of 3 mL containing the spray-dried anticoagulant BAPA.

The concentration indicated in the BAPA tube for a blood sample is  $\geq 50 \mu\text{g} / \text{mL}$ .



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES AR CHIPS - T-TAS® 01

CONSUMABLES FOR DOSAGE

Analyzers



## AR Chip T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-19001	Consumables	1 x 20 units	20

**AR Chip for T-TAS® 01 is used to analyze the function of platelets and blood aggregation under physiological conditions of blood circulation.**

AR chip has a 80 µm depth flow chamber coated with collagen and tissue thromboplastin, and mimics in vivo blood flow with 600/s shear stress, which represents shear stresses in large arteries.



## Components

- 1 box x 20 Chips

## Advantages

A distinct advantage of using a flow chamber system for the measurement of thrombus formation is the correlation with the in vivo thrombus formation process. Scanning electron microscopic (SEM) analyses of thrombi inside AR chip showed that thrombi formed within the microchip capillaries under flow condition were tightly packed and contained numerous activated platelets. In contrast, thrombi formed under static condition was mainly composed of erythrocytes surrounded by fibrin fibers.

The AR chip has an 80 µm thick flow chamber coated with both collagen and thromboplastin (tissue factor). Blood flow is maintained at 600 / s, mimicking in vivo blood flow in the large arteries. Ready to use.

## Characteristics

The inner surface of the AR chip capillary is covered with tissue collagen and thromboplastin.

## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.

## INSTRUMENTS

## T-TAS®01

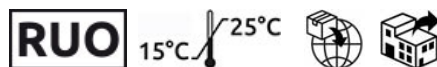
## CONSUMABLES AR CHIPS - T-TAS® 01

CONSUMABLES FOR DOSAGE

Analyzers



## AR &amp; HD Chip Reservoir Set T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-19003	Consumables	1 x 100 sets	100

## Consumable for T-TAS® 01

Reservoir for receiving approximately 240 µL of whole blood which is connected to the AR chip measurement chips.

## Components

- 1 box x 100 sets

## Advantages

The AR chip has an 80 µm thick flow chamber coated with both collagen and thromboplastin (tissue factor). Blood flow is maintained at 600 / s, mimicking in vivo blood flow in the large arteries. Ready to use.

## Characteristics

The inner surface of the AR chip capillary is covered with tissue collagen and thromboplastin.



## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES AR CHIPS - T-TAS® 01

CONSUMABLES FOR SAMPLING

Analyzers



## CaCTI Reagent for AR &amp; HD Chip T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-19004	Consumables	1 x 0.4 mL	1 x 20

**Consumable for T-TAS® 01**

CaCTI solution (Calcium Corn Trypsin inhibitor) for measurement with the AR chip.

## Components

- 1 cryotube x 0.4 mL

## Characteristics

CTI works to inhibit the intrinsic signaling pathway (contact pathway) of coagulation by reversibly binding to FXIIa.

Calcium ions are used to recalcify citrated blood, suppressing the inhibition of several coagulation factors (FIXa, FXa) allowing the extrinsic pathway to initiate its own activation.

## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.





## INSTRUMENTS

## T-TAS®01

## CONSUMABLES HD CHIPS - T-TAS® 01

CONSUMABLES FOR DOSAGE

Analyzers



## HD Chip T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

## Auxiliary reagents

Anti-sedimentation reagent for HD Chip T-TAS®01

## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.

Reference	Presentation	Format	Number of tests
25-19002	Consommables	1 x 20 Chips	20

**HD chip is designed to measure overall hemostatic function in whole blood samples with low platelet count (10,000 – 90,000/ $\mu$ L).**

## Components

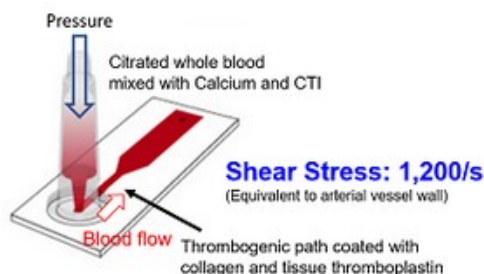
- 1 box x 20 Chips

## Advantages

The HD chip has a 50  $\mu$ m deep flow chamber coated with collagen and tissue thromboplastin, and mimics blood flow in vivo with a shear stress of 1200 /s, which represents shear stresses to the vessel wall arterial. Ready to use.

## Characteristics

Whole blood is perfused at a constant flow rate at 37°C through the flow chamber pre-coated with tissue thromboplastin and collagen. Changes of flow pressure are monitored by the pressure transducer located upstream in the chamber. Thrombus formation within the flow chamber increases flow resistance causing the pressure to increase. OST (Occlusion Start Time) is the lag time for the flow pressure to reach 10 kPa due to partial occlusion of the capillary. OT (Occlusion Time) is the lag time for the flow pressure to reach 60 kPa from baseline pressure. The AUC (Area Under the Curve) is the area under the flow pressure vs. time curve and is related to overall thrombus formation. Primary result is generated as AUC.



## INSTRUMENTS

## T-TAS®01

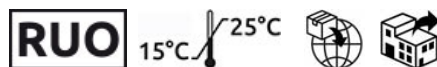
## CONSUMABLES HD CHIPS - T-TAS® 01

CONSUMABLES FOR DOSAGE

Analyzers



## AR &amp; HD Chip Reservoir Set T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

CaCTI Reagent for AR &amp; HD Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-19003	Consumables	1 x 100 sets	100

## Consumable for T-TAS® 01

Reservoir for receiving approximately 240 µL of whole blood which is connected to the AR chip measurement chips.

## Components

- 1 box x 100 sets

## Advantages

The AR chip has an 80 µm thick flow chamber coated with both collagen and thromboplastin (tissue factor). Blood flow is maintained at 600 / s, mimicking in vivo blood flow in the large arteries. Ready to use.

## Characteristics

The inner surface of the AR chip capillary is covered with tissue collagen and thromboplastin.



## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.



## INSTRUMENTS

## T-TAS®01

## CONSUMABLES HD CHIPS - T-TAS® 01

CONSUMABLES FOR SAMPLING

Analyzers



## CaCTI Reagent for AR &amp; HD Chip T-TAS® 01



## Associated products

T-TAS® 01

Barcode Scanner T-TAS® 01

HD Chip T-TAS® 01

AR &amp; HD Chip Reservoir Set T-TAS® 01

AR Chip T-TAS® 01

BAPA Tube T-TAS® 01

PL Chip T-TAS® 01

Reservoir set PL Chip T-TAS® 01

Reference	Presentation	Format	Number of tests
25-19004	Consumables	1 x 0.4 mL	1 x 20

## Consumable for T-TAS® 01

CaCTI solution (Calcium Corn Trypsin inhibitor) for measurement with the AR chip.

## Components

- 1 cryotube x 0.4 mL

## Characteristics

CTI works to inhibit the intrinsic signaling pathway (contact pathway) of coagulation by reversibly binding to FXIIa.

Calcium ions are used to recalcify citrated blood, suppressing the inhibition of several coagulation factors (FIXa, FXa) allowing the extrinsic pathway to initiate its own activation.

## Informations

A complex web of biochemical and physical reactions between platelets and clotting factors at the site of vascular injury is required to achieve hemostasis.

Under flow conditions, platelet activation and coagulation processes are dynamically intertwined with each other affected by platelets, coagulation factors and their various inhibitors and activators.



## INSTRUMENTS

## T-TAS®01

CONSUMABLES HD CHIPS - T-TAS® 01

ADDITIONAL REAGENTS

# Anti-sedimentation reagent for HD Chip T-TAS®01



## Associated products

HD Chip T-TAS® 01

## Informations

Erythrocyte sedimentation inside the reservoir of the HD assay has been observed in some cases, and the prevention of erythrocyte sedimentation is expected to result in a more accurate and repeatable analysis of HD chip.

Reference	Presentation	Format
25-NS0001	Vial	1 x 2.0 mL

**Reagent to prevent sedimentation of samples that will be tested using the HD chip for T-TAS®01.**

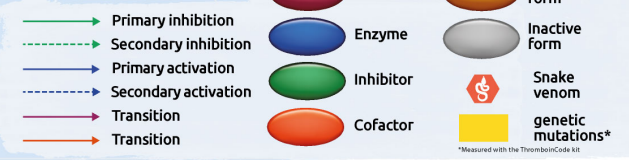
## Components

- 1 vial x 2.0 mL of Anti-Sedimentation Reagent



# THE COAGULATION CASCADE

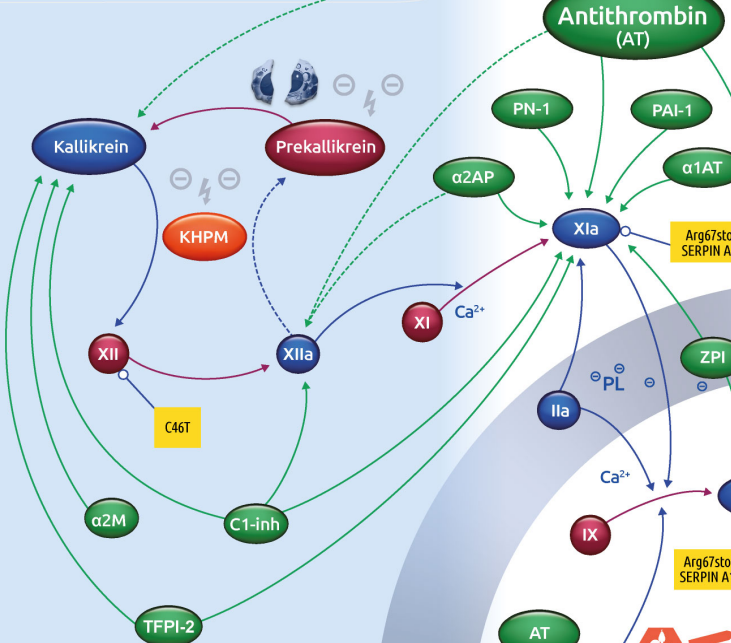
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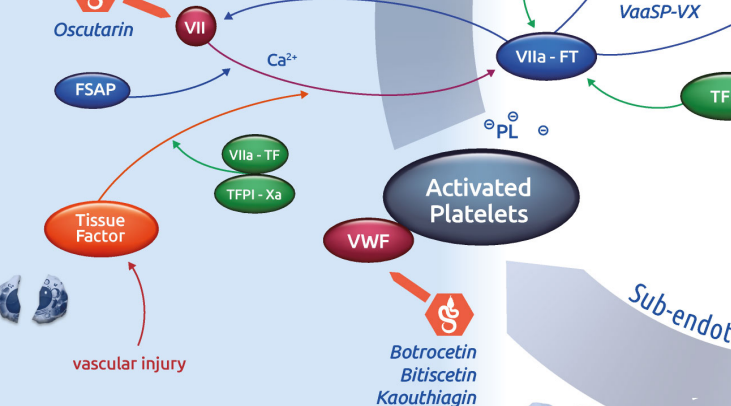
## Glossary

- a1AT : Alpha-1 Antitrypsin
- a2AP : Alpha-2 AntiPlasmin
- a2M : Alpha-2 Macroglobulin
- C1-inh : C1 inhibitor
- C4BP : C4 Binding Protein
- EPCR : Endothelial Protein C Receptor
- FSAP : Factor VII activating Protease
- TF : Tissue Factor
- HCII : Heparin Cofactor II
- HMWK : High Molecular Weight Kininogen
- PAI : Plasminogen Activator Inhibitor
- PC/PCI : Protein C / PC inhibitor
- PL : Phospholipids
- PN-1 : Protease Nexin-1
- Protac<sup>®</sup> : Agkistrodon contortrix venom
- PS : Protein S
- PZ : Protein Z
- sEPCR : soluble Endothelial Protein C Receptor
- SVTLEs : Snake Venom Thrombin Like Enzymes
- TAFI : Thrombin Activatable Fibrinolysis Inhibitor
- TFPI : Tissue Factor Pathway Inhibitor
- TM : Thrombomodulin
- t-PA : Tissue-type Plasminogen Activator
- u-PA : Urokinase Plasminogen Activator
- VaaSP : Venom activating activity Serin Protease
- VWF : Von Willebrand Factor
- ZPI : Protein Z inhibitor

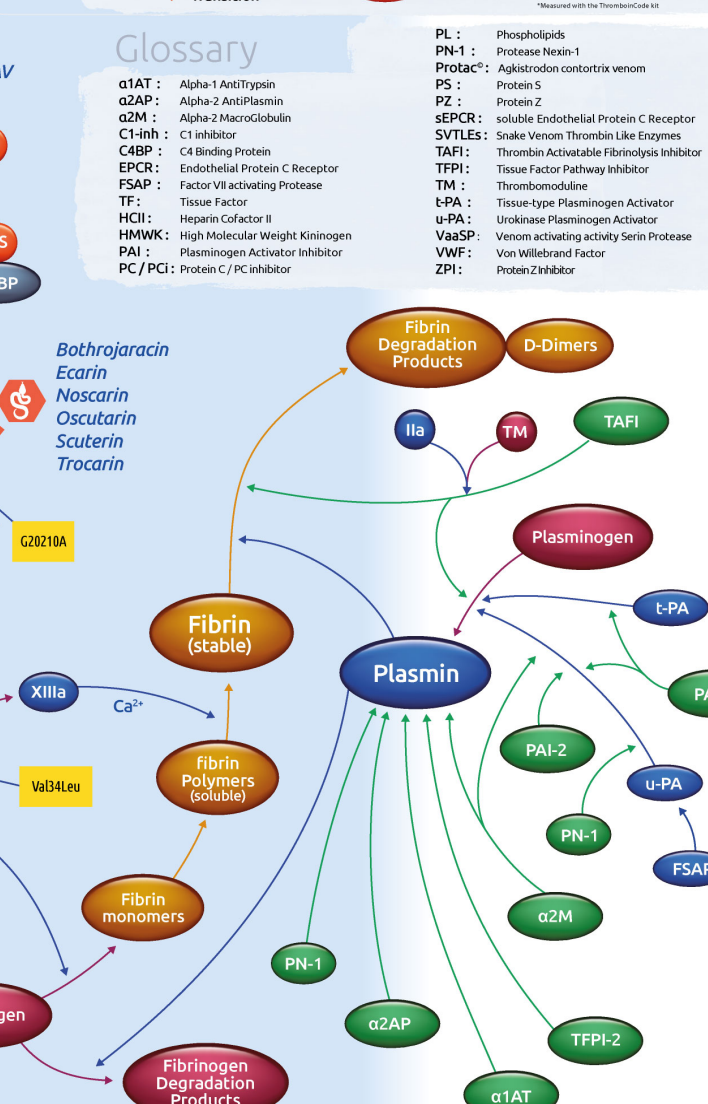
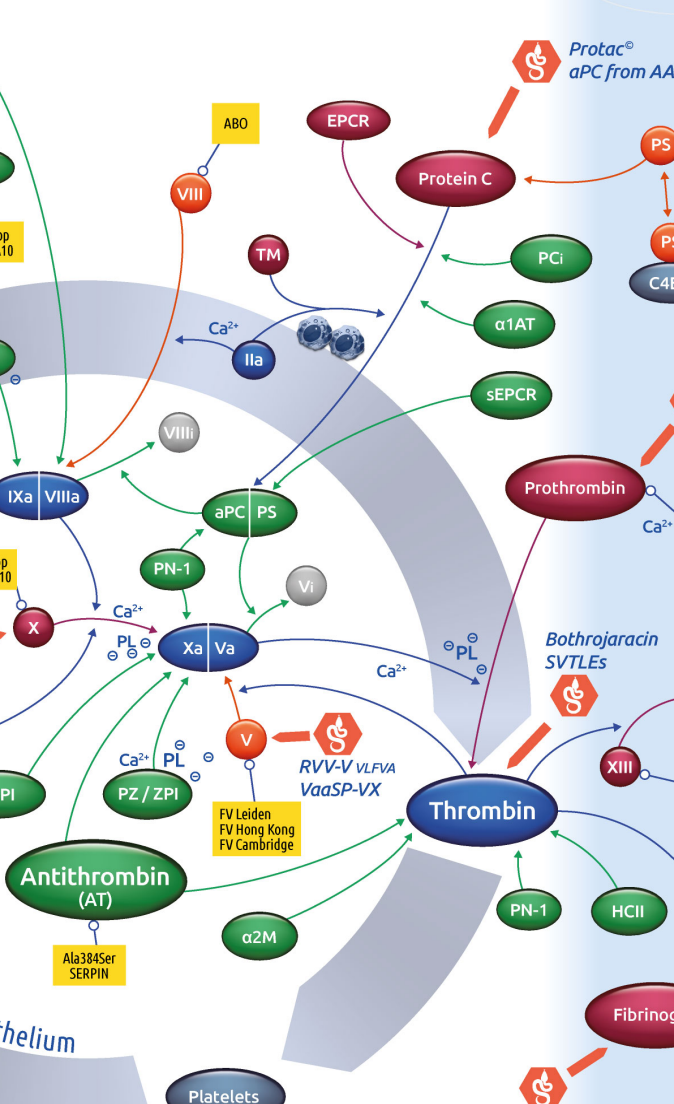
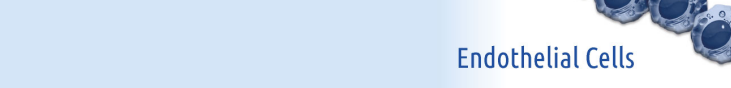
## Intrinsic pathway



## Extrinsic pathway



## Sub-endothelium



## FIBRINO-FORMATION

## FIBRINOLYSIS

## ACTIVATION

## AMPLIFICATION

# ALPHABETICAL INDEX

ACTICHROME® TF	164	DOAC-Stop Liquid™	221	Siron LS (aPTT liquid)	12
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ACTICLOT® dPT™	113	EMICIZUMAB Calibrator	130	Solution CaCl2 50 mM	223
ACTICLOT® Protein S	162	EMICIZUMAB Controls	131	T-TAS® 01	227
ActiScreen™ XL-FDP	120	Factor II Deficient Plasma Immunodepleted	56	TECHNOCHROM® anti-Xa	86
AK Verification Kit	42	Factor IX Deficient Plasma Native	64	TECHNOCHROM® ATIII analyzer Kit	155
AK-Calibrant	41	Factor IX Inhibitor Plasma Negative Control	76	TECHNOCHROM® C1-INH	157
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APC Resistance Kit	150	Factor IXa Control	143	TECHNOCHROM® Protein C	158
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AR Chip T-TAS® 01	231	Factor VII Deficient Plasma Immunodepleted	58	TECHNOCLOT® Control N	44
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Coagulation Control AK	43	Factor VIII Inhibitor Plasma Negative Control	74	TECHNOCLOT® PT Owren Manual	7
Coagulation Control N	36	Factor VIII Inhibitor Plasma Weak Control	73	TECHNOLEIA® D-Dimer Calibrator 0 ng/mL	125
Coagulation Reference	32	Factor VIII Inhibitor Reagent Kit (Bethesda Unit)	68	TECHNOLEIA® D-Dimer Calibrator 3000 ng/mL	124
Coumadin Plasma	26	Factor VIII Inhibitor Reagent Kit (Bethesda Unit)	69	TECHNOLEIA® D-Dimer Control High	122
Coumadin Plasma Set	27	Factor X Deficient Plasma Immunodepleted	59	TECHNOLEIA® D-Dimer Control Low	123
CRYOcheck™ Lupus Negative Control	118	Factor XI Deficient Plasma Native	65	TECHNOLEIA® D-Dimer LATEX KIT	126
CRYOcheck™ Abnormal 1 Control	28	Factor XIa Calibrator	147	TECHNOPLASTIN® HIS	6
CRYOcheck™ Abnormal 1 Reference Control	23	Factor XIa Control	146	TECHNOSCREEN® ADAMTS13 Activity	178
CRYOcheck™ Abnormal 2 Control	29	Factor XII Deficient Plasma Native	66	TECHNOTHROMBIN® TGA Cal Set	218
CRYOcheck™ Abnormal 2 Reference Control	24	Factor XIII Deficient Plasma	61	TECHNOTHROMBIN® TGA Control High	216
CRYOcheck™ APCR Positive Control	154	Fibrinogen Reagent	16	TECHNOTHROMBIN® TGA Control Low	217
CRYOcheck™ Chromogenic Factor IX	134	Fibrinogen Reagent Kit	15	TECHNOTHROMBIN® TGA Kit	209
CRYOcheck™ Chromogenic Factor VIII	132	Fitzgerald Trait Plasma	62	TECHNOTHROMBIN® TGA RA	210
CRYOcheck™ Clot C™	161	Fletcher Trait Plasma	67	TECHNOTHROMBIN® TGA RB	211
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CRYOcheck™ CorPac™	5	HRRS Solution CaCl2 0.025M neutralizing UFH	220	TECHNOTHROMBIN® TGA RC LOW	212
CRYOcheck™ Factor II Deficient Plasma	46	Human TFPI Depleted Plasma	140	TECHNOTHROMBIN® TGA RD	214
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CRYOcheck™ Factor V Deficient Plasma	47	IMUBIND® Factor VIIa ELISA	141	TECHNOVIEW® Apixaban Cal Set	109
CRYOcheck™ Factor VII Deficient Plasma	48	IMUBIND® Tissue Factor ELISA	136	TECHNOVIEW® Apixaban Cont High	110
CRYOcheck™ Factor VIII Deficient Plasma	50	IMUBIND® Tissue PAI-1 ELISA	202	TECHNOVIEW® Apixaban Cont Low	111
CRYOcheck™ Factor VIII Deficient Plasma with V	51	IMUCLONE™ Total TAFI ELISA	137	TECHNOVIEW® Argatroban Cal Set	100
CRYOcheck™ Factor VIII Inhibitor Kit	70	INTER-ARRAY VWF:PP ELISA Kit	182	TECHNOVIEW® Argatroban Cont High	102
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CRYOcheck™ Factor XII Deficient Plasma	54	Pefakit® APC-R Factor V Leiden	152	TECHNOVIEW® Arixtra® Cont High	82
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CRYOcheck™ LA Check™	116	Pefakit® TAFI	138	TECHNOVIEW® Dabigatran Cont High	98
CRYOcheck™ LA Sure™	117	Pefakit® TAFI Controls and Calibration	139	TECHNOVIEW® Dabigatran Cont Low	99
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CRYOcheck™ Lupus Positive Control	115	Plasma from 50 healthy donors	3	TECHNOVIEW® Edoxaban Cont High	96
CRYOcheck™ Normal Donor Set	4	Pool of fresh serum from healthy donors	2	TECHNOVIEW® Edoxaban Cont Low	94
CRYOcheck™ Normal Reference Plasma	18	Reservoir set PL Chip T-TAS® 01	229	TECHNOVIEW® Edoxaban Cont Medium	95
CRYOcheck™ Platelet Lysate	114	Rox Factor IX	133	TECHNOVIEW® LMW Cal Set	87
CRYOcheck™ Pooled Normal Plasma	1	Rox Factor Prothrombin	127	TECHNOVIEW® LMW Cont High	90
CRYOcheck™ Prekallikrein Deficient Plasma	55	Rox Factor VIII	129	TECHNOVIEW® LMW Cont Low	88
CRYOcheck™ Reference Control Normal	25	Rox Factor XIa	145	TECHNOVIEW® LMW Cont Medium	89
CRYOcheck™ Weak Lupus Positive Control	119	Rox FIX-A	142	TECHNOVIEW® Orgaran® Cal Set	77
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TECHNOVIEW® Rivaroxaban Cal Set	103	
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TECHNOVIEW® Rivaroxaban Cont Low	104	
TECHNOVIEW® Rivaroxaban Cont Medium	105	
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# TERMS AND CONDITIONS

## 1. APPLICABLE RIGHT

The customer recognizes and agrees that these Terms and Conditions (below "Terms") govern all relations with the company CRYOPEP and they supersede the terms of any purchase by the customer. Any additions, modifications or deletions made to these Terms and Conditions of Sale shall be null and void unless approved in writing by CRYOPEP. The failure or delay of CRYOPEP to enforce any of these Terms and Conditions of Sale shall not be deemed to be a waiver by CRYOPEP of any such terms. The parts shall designate by common agreement the French law as the only law applicable to contractual relations between CRYOPEP and his customer, and that the exclusion-specific provisions of the Vienna Convention.

## 2. JURISDICTION

It is made of jurisdiction to the courts of Montpellier, which have exclusive jurisdiction, regardless of the nature, cause and location of the dispute and which may be the special conditions of sale, even in the case of appeal or multiple defendants. Our deliveries, our belongings, our acceptances regulations do not constitute either novation or derogation from the jurisdiction clause.

## 3. ORDER

The order is final only if the order is received in the form of a letter, fax, email or through a recognized CRYOPEP website online ordering system and has references to the designation of products ordered, of quantity, price, and the identification of the customer's signature and only after acceptance of such order by CRYOPEP.

## 4. DELIVERY TIME

The delivery time is at least 24 to 72 hours and in any event, time that could be communicated to the customer by CRYOPEP are given only for illustrative purposes and do not constitute a commitment on CRYOPEP. They begin to run until all specifications are finalized by mutual agreement and that any payments have been paid by the customer CRYOPEP. CRYOPEP will not be obliged to pay any compensation or damages whatsoever for any delay in delivery due to the carrier or other third parties, and in cases of force majeure, in particular in case of strikes, social unrest, adverse weather conditions, etc.

## 5. DELIVERIES – SHIPMENTS

For France and Benelux: shipments are carriage paid when the net amount of the order exceeds one thousand two hundred EUR (€ 1,200). For orders of less than one thousand two hundred EUR (€ 1,200) excluding VAT, transport costs of forty EUR (€ 40) will be applied. Transport costs are increased by an additional forty EUR (40 €) if the products are shipped frozen.

For all other countries: shipping costs will be calculated based on the actual shipping costs with insurance. Transport costs are increased by an additional forty EUR (40 €) if the products are shipped frozen.

No product returns are accepted by CRYOPEP without prior written authorization.

## 6. PRICE AND BILL

The price of the products ordered is the one in force at the date of the order for the calendar year, or if the date of delivery thereof to the customer's request, is subsequent to the date of entry into force of the new rate.

## 7. PAYMENT

Invoices are payable upon receipt unless prior written agreement CRYOPEP. Payment is made at the address overleaf and failing that, to our headquarters. The financial cost of any delay in payment or deferment is charged by right, without the need of a formal notice at the rate of one and a half times the legal rate of interest. This interest is due from the first day of delay.

Effective 1 January 2013, a new fixed penalty will be due the creditor right, without the need of a formal notice to any payment made after the due date. Decree 2012-1115 of October 2, 2012 fixed this late penalty to forty EUR (€ 40). However, if the recovery costs incurred would be higher, CRYOPEP may, upon justification, claim a lump sum later.

## 8. GUARANTEE

Our products are guaranteed for one year from the date of delivery, unless otherwise stated, against any manufacturing defect or malfunction of the product with the exception of any incident due to normal wear and tear, due to handling or not in accordance with requirements contained in the documents and manuals delivered with the product or, more generally, for any abnormal operation or handling. The warranty covers the exchange of defective parts by CRYOPEP. This warranty does not cover glass parts. It does not include either the consequences of a possible detention of personnel or equipment or any other direct or indirect consequence of the failure of all or part of the products. This warranty begins on the date of delivery of the products. The interventions by CRYOPEP under this warranty do not have the effect of extending. CRYOPEP's responsibility is expressly limited to the warranty specified above and can in no way be held liable due to accidents to persons and things. CRYOPEP is not responsible for damage to customer property used for business purposes. In no event shall the responsibility of CRYOPEP exceed the price paid by the customer for the products concerned. The guarantee is removed and CRYOPEP is relieved of all responsibility when the product has been altered or modified, where the damage is due to negligence, improper storage, improper use, failure to follow instructions contained in the direction insert or if the customer does not meet its contractual payment obligations.

## 9. RETENTION OF TITLE

It is expressly agreed that CRYOPEP retains ownership of the goods to the order, until full payment of the price in principal and interest, the delivery of effects or other instrument creating an obligation to pay does not constitute a payment. CRYOPEP reserves the right to either initiate litigation as defined in paragraph 10 is to solve right sale 15 days after notice by registered letter with acknowledgment of receipt unsuccessful. In this case the customer must return the products purchased CRYOPEP.

In case of bankruptcy of the customer, products of the order may be asserted under the provisions of the Commercial Code. Products designated above remain the property of CRYOPEP until full payment of the price, it is expressly forbidden to the customer pledge or otherwise dispose of, to sell or transform. In case of seizure by third parties on these products, the customer is obliged to immediately inform CRYOPEP.

## 10. COMPLAINTS

Any complaints should be addressed to CRYOPEP within 2 days from the date of actual receipt. In case of default of payment of any invoice resulting from the use CRYOPEP litigation, it is applied as damages, an amount equivalent to 20% of the unpaid, in addition to legal fees and financial charges defined paragraph 7. In the event of a dispute concerning the interpretation of these Terms, the French version of the said Conditions shall be considered.

# Cryopep

Cryogenics at the service of haemostasis



visit our website : [www.cryopep.com](http://www.cryopep.com)