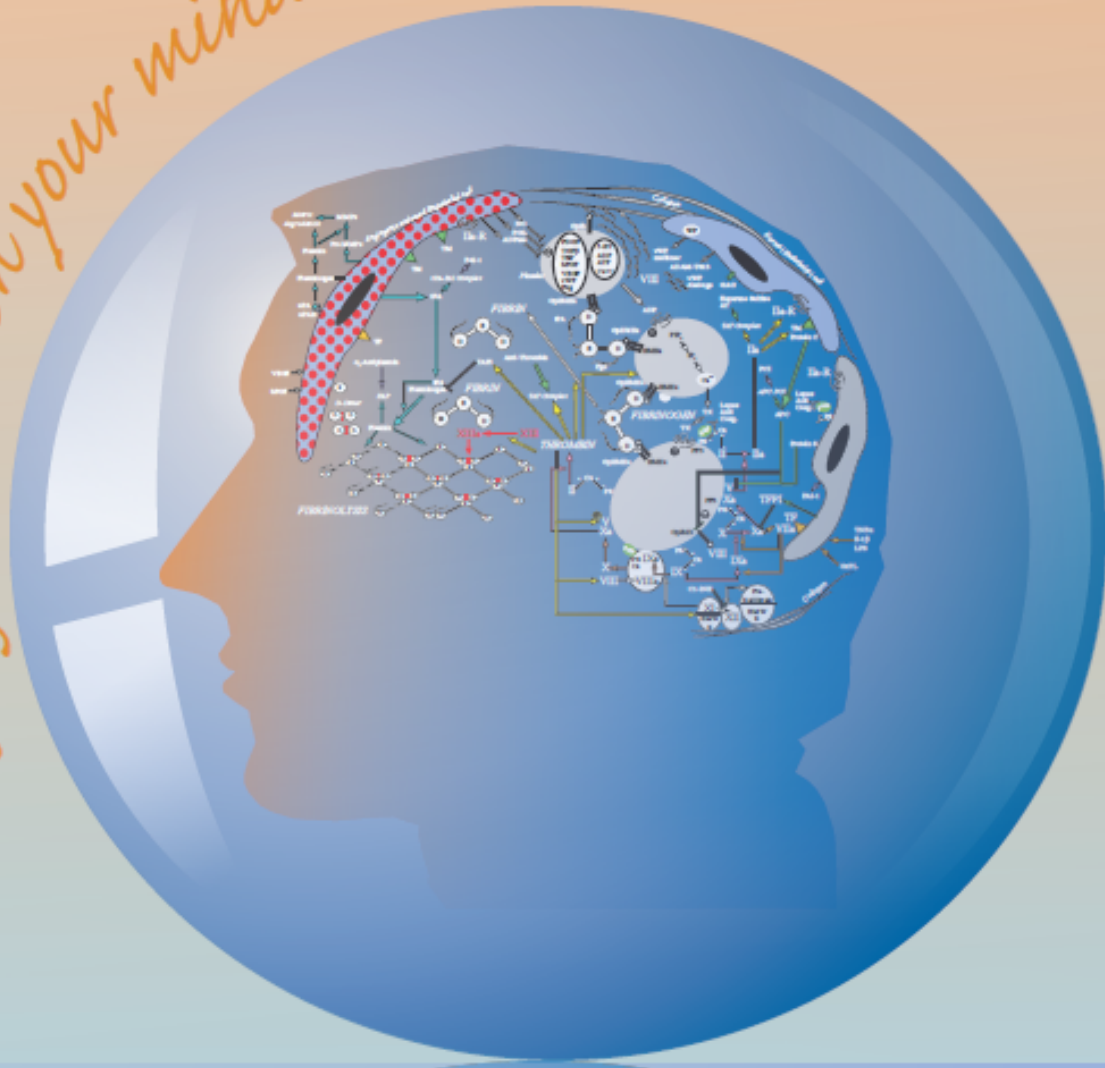


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PRODUCT LIST 2015

D I A G N O S T I C S

Global Tests | Calibrators & Controls | Factor Assays | Anticoagulant Treatments | Thrombophilia
Thrombosis | Fibrinolysis | Thrombin Generation | Instruments | Research Products

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Prothrombin Time (PT)

The **TECHNOCLOT® PT Series** is a thromboplastin reagent derived from rabbit. Thromboplastins are a mixture of tissue factor, phospholipid, and calcium.

The Prothrombin Time (PT) is used to:

- Screen for congenital or acquired deficiencies in the extrinsic and common pathways
- Monitor warfarin therapy
- Aid in the diagnosis of DIC
- Aid in the diagnosis of inhibitors to Factors II, V, and X

For warfarin monitoring the most common reporting method is the INR; in certain countries an alternative normalization method known as the Prothrombin percent activity, is used.

INR is based on the following formula:

$$INR = \left(\frac{PT \text{ patient plasma (sec)}}{PT \text{ normal plasma (sec)}} \right)^{ISI}$$

The **TECHNOCLOT® PT Owren** is a thromboplastin reagent modified according to Owren. The reagent is enriched with bovine plasma from which the prothrombin complex factors II, VII and X have been removed by adsorption. The bovine plasma remains a source of fibrinogen and factor V, therefore cannot abnormalities in these proteins be detected by the test.

The reagent is available in two formats, one for the **manual** method and one for **automated** use on coagulation analyzer.

| Product | Description | REF | Package |
|---|--|----------|------------|
| TECHNOCLOT® PT ISI < 1.2 | Lyophilized rabbit brain thromboplastin (without solvent) | 5003128 | 10 x 4 ml |
| | | 5003129 | 10 x 10 ml |
| TECHNOCLOT® PT Plus ISI < 1.2 | Lyophilized rabbit brain thromboplastin (includes solvent) | 5003220 | 5 x 4 ml |
| | | 5003222 | 10 x 10 ml |
| TECHNOCLOT® PT Owren manual ISI < 1.2 | Lyophilized thromboplastin. For the determination of the combined factors II-VII-X. | 5005032 | 10 x 4 ml |
| | | 5005037 | 10 x 10 ml |
| TECHNOCLOT® PT Owren automated ISI < 1.2 | Lyophilized thromboplastin. For the determination of the combined factors II-VII-X. | 5005044* | 10 x 4 ml |
| | | 5005046* | 10 x 10 ml |
| *Auxiliary reagent required and not supplied with the kit | | | |
| CaCl₂ 25 mM | Reaction buffer for TECHNOCLOT® PT Owren automated | 5277017 | 20 ml |
| | | 5277020 | 9 x 20 ml |
| Imidazole Buffer | Sample dilution buffer for TECHNOCLOT® PT Owren automated | 5410008 | 20 ml |
| | | 5410007 | 9 x 20 ml |

GLOBAL TESTS

Activated Partial Thromboplastin Time (aPTT)

Technoclon **aPTT reagents** are mixtures of different ratios activators and phospholipids in order to provide reagents with different sensitivities to heparin, lupus and factors

The aPTT Test is used to:

- Screen for congenital or acquired deficiencies in the intrinsic and contact pathways
- Monitor heparin therapy
- Aid in the diagnosis of Lupus Anticoagulants
- Aid in the diagnosis of inhibitors to Factors VIII, IX and XI

aPTT measurement is the time taken for a fibrin clot to form, results are reported in seconds. For monitoring anticoagulant drugs the results are often expressed as a multiple of the mean normal time.

| aPTT Reagents: | DAPTTIN[®] TC | SIRON LS (Lupus Sensitive) | SIRON LIS (Lupus Insensitive) |
|---------------------|-------------------------------|--------------------------------------|---|
| Factor Sensitivity | ++ | +++ | +++ |
| Lupus Sensitivity | ++ | +++ | + |
| Heparin Sensitivity | ++ | ++ | ++ |

For Control Plasmas see page 7.

| Product | Description | REF | Package |
|--|--|---------|------------|
| DAPTTIN[®] TC | Lyophilized double activated aPTT reagent with sulfatides and silica as surface activators. | 5035060 | 5 x 2 ml |
| | | 5035090 | 6 x 10 ml |
| | | 5035100 | 20 x 10 ml |
| SIRON LS (Lupus Sensitive) | Liquid lupus sensitive aPTT reagent containing a soluble activator prepared from ellagic acid. | 5035105 | 2 x 4 ml |
| | | 5035107 | 10 x 4 ml |
| | | 5035109 | 10 x 10 ml |
| SIRON LIS (Lupus Insensitive) NEW | Liquid low lupus sensitive aPTT reagent containing a soluble activator prepared from ellagic acid. | 5035118 | 2 x 4 ml |
| | | 5035119 | 10 x 4 ml |
| | | 5035121 | 10 x 10 ml |
| Auxiliary reagent required and not supplied with the kit | | | |
| CaCl₂ 25 mM | | 5277017 | 20 ml |
| | | 5277020 | 9 x 20 ml |

GLOBAL TESTS

Fibrinogen

The **Fibrinogen reagent** of Technoclone is a modified Clauss Reagent with a high thrombin concentration to make the test virtually insensitive to heparin and to enhance clot detection.

The Fibrinogen is used :

- in the diagnosis of DIC
- in the diagnosis of liver failures
- to detect qualitatively abnormalities of fibrinogen
- to determine quantitatively deficiency of fibrinogen

A calibration curve of clotting time versus concentration in g/dL is first determined with a plasma having a known concentration of fibrinogen, such as Coagulation Reference or TECHNOCLOT® Reference. The fibrinogen concentration of patient samples are read off the calibration curve.

For Calibration & Control Plasmas see page 6 and 7.

| Product | Description | REF | Package |
|--|---|--------------------|----------------------|
| Fibrinogen Reagent Kit | The Fibrinogen Reagent kit contains: 5 x 2 ml Fibrinogen Reagent 1 x 1 ml Coagulation Reference | 5138005 | ~ 45 T. |
| Fibrinogen Reagent | Lyophilized fibrinogen reagent ~ 80 I.U. ml | 5138080 5138085 | 5 x 5 ml 5 x 2 ml |
| Auxiliary reagent required and not supplied with the kit | | | |
| Imidazole Buffer | | 5410008 5410007 | 20 ml 9 x 20 ml |

Thrombin Time

The **Thrombin Reagent** is a standardized thrombin time reagent produced from bovine thrombin for the normal and therapeutic (heparin and fibrinolytic) ranges.

The Thrombin Time is used :

- to detect qualitatively abnormalities of fibrinogen
- to assess the effectiveness of fibrinolytic therapy

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

For Control Plasmas see page 7.

| Product | Description | REF | Package |
|-------------------------|-----------------------------------|---------|----------|
| Thrombin Reagent | Lyophilized thrombin time reagent | 5100005 | 6 x 6 ml |

CALIBRATORS & CONTROLS

Technoclone has two Calibrator and Control Series.

The **Coagulation Series** includes values for screening test, factor assays and inhibitors, not only for Technoclone reagents but also for screening tests reagents/analyzer combination of other coagulation companies. The values are therefore established internally and externally,

The **TECHNOCLOT® Series** includes values from a limited number of for screening tests. All values are established internally with Technoclone reagents.

| | Coagulation Series | TECHNOCLOT® Series |
|--|--|--------------------|
| PT aPTT | ✓ ✓ | ✓ ✓ |
| Fibrinogen Fibrinogen cleavage Thrombin Time | ✓ ✓ ✓ | ✓ ✓ |
| FII FV FVII FVIII FIX FX FXI FXII FXII | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | |
| HMW-Kininogen Prekallikrein | ✓ ✓ | |
| vWF ATIII C1-INH | ✓ ✓ ✓ | ✓ |
| Protein C Protein S | ✓ ✓ | |

Reference Plasma

Reference Plasma can be used as a calibration plasma for the functional assays mentioned above.

| Product | Description | REF | Package |
|------------------------------|---|---------|-----------|
| Coagulation Reference | Lyophilized calibration plasma for screening tests, single factors and inhibitors | 5220110 | 5 x 1 ml |
| | | 5220120 | 50 x 1 ml |
| TECHNOCLOT® Reference | Lyophilized calibration plasma for screening tests (PT/aPTT/Fibrinogen/TT/AT) | 5220170 | 10 x 1 ml |
| | | 5220175 | 50 x 1 ml |

CALIBRATORS & CONTROLS

Normal Control Plasma

Normal Control Plasma can be used to determine and monitor the accuracy and precision of the functional assays mentioned.

| Product | Description | REF | Package |
|------------------------------|--|---------|-----------|
| Coagulation Control N | Lyophilized normal control plasma for screening tests, single factors and inhibitors | 5020040 | 5 x 1 ml |
| | | 5020050 | 50 x 1 ml |
| TECHNOCLOT® Control N | Lyophilized normal control plasma for screening tests (PT/aPTT/Fibrinogen/TT/AT) | 5020070 | 10 x 1 ml |
| | | 5020075 | 50 x 1 ml |

Abnormal Control Plasma

Abnormal Control Plasma can be used to determine and monitor the accuracy and precision of the functional assays mentioned.

| Product | Description | REF | Package |
|------------------------------|--|---------|-----------|
| Coagulation Control A | Lyophilized abnormal control plasma for screening tests, single factors and inhibitors | 5021055 | 5 x 1 ml |
| | | 5021060 | 50 x 1 ml |
| TECHNOCLOT® Control A | Lyophilized abnormal control plasma for screening tests (PT/aPTT/Fibrinogen/TT/AT) | 5021070 | 10 x 1 ml |
| | | 5021075 | 50 x 1 ml |

Abnormal Control Plasma Level 2

Abnormal Control Plasma Level 2 can be used to determine and monitor the accuracy and precision of the screening tests. In the Level 2 Abnormal Control the thrombin time is significantly decreased compared to the Abnormal Control Plasma.

| Product | Description | REF | Package |
|-------------------------------|--|---------|-----------|
| TECHNOCLOT® Control A2 | Lyophilized abnormal control plasma for screening tests (PT/aPTT/Fibrinogen/TT/AT) | 5021062 | 10 x 1 ml |
| | | 5021064 | 50 x 1 ml |

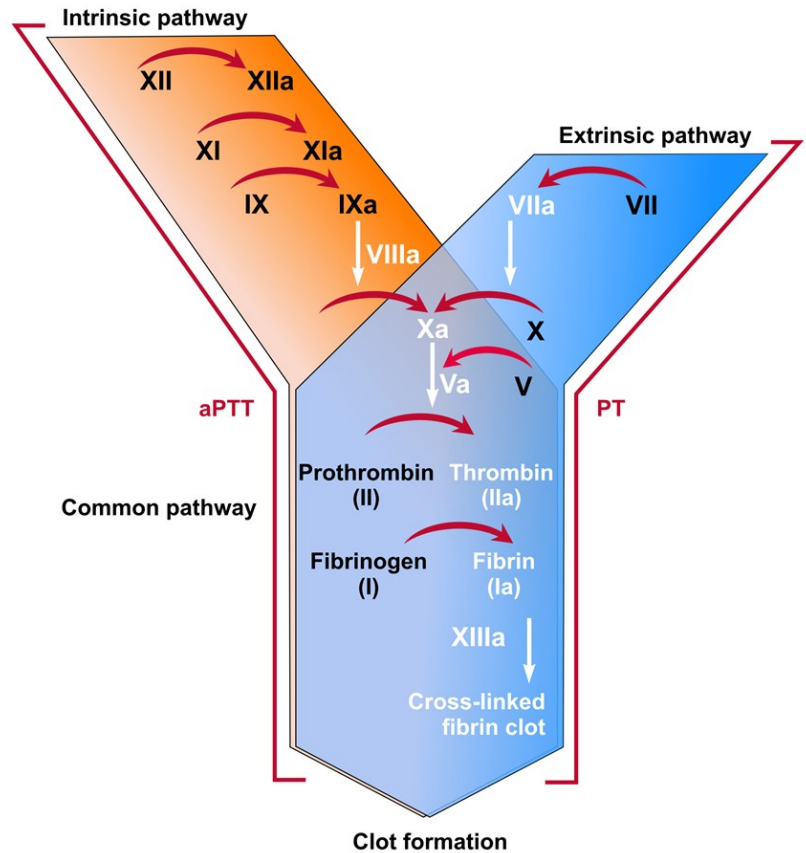
FACTOR ASSAYS

Factor deficiencies are both congenital and acquired. Factor assays provides a quantitative determination of activity. A dilution of the patient sample is added to deficiency plasma of the factor of interest and run in a PT (for the extrinsic and common pathway factors) or in an aPTT (for the intrinsic factors).

Factor activity assays are calibrated with a plasma of known concentration of the factor of interest like the Coagulation Reference with defined factor activities.

Factor activity assays are reported in % Activity.

For Calibration & Control Plasmas see page 6 and 7.



Deficient Plasma Extrinsic and Common Pathway (PT)

Factors of the extrinsic and Common Pathway are tested with Prothrombin Time (PT) reagents using plasma deficient of Factor II, V, VII and X.

| Product | Description | REF | Package |
|------------------------------------|---|---------|----------|
| Factor II deficient plasma | Lyophilized Factor II deficient plasma, immunodepleted | 5114008 | 5 x 1 ml |
| Factor V deficient plasma | Lyophilized Factor V deficient plasma, immunodepleted | 5134004 | 5 x 1 ml |
| Factor VII deficient plasma | Lyophilized Factor VII deficient plasma, immunodepleted | 5144015 | 5 x 1 ml |
| Factor X deficient plasma | Lyophilized Factor X deficient plasma, immunodepleted | 5174006 | 5 x 1 ml |
| | Lyophilized Factor X deficient plasma, native | 5174004 | 5 x 1 ml |

Auxiliary reagents required and not supplied with the kit

| | | | |
|---------------------------------------|--|---------|-------|
| Citrate Sodium Chloride Buffer | Dilution buffer for determination of coagulation factors II, V, VII and X with PT reagents | 5400045 | 60 ml |
| | | 5400047 | 20 ml |

FACTOR ASSAYS

Deficient Plasma Intrinsic Pathway (aPTT)

Factors of the intrinsic Pathway are tested with activated Partial Thromboplastin Time (aPTT) reagents using plasma deficient of Factor VIII, IX, XI and XII as well as Fitzgerald and Fletcher Trait Plasma.

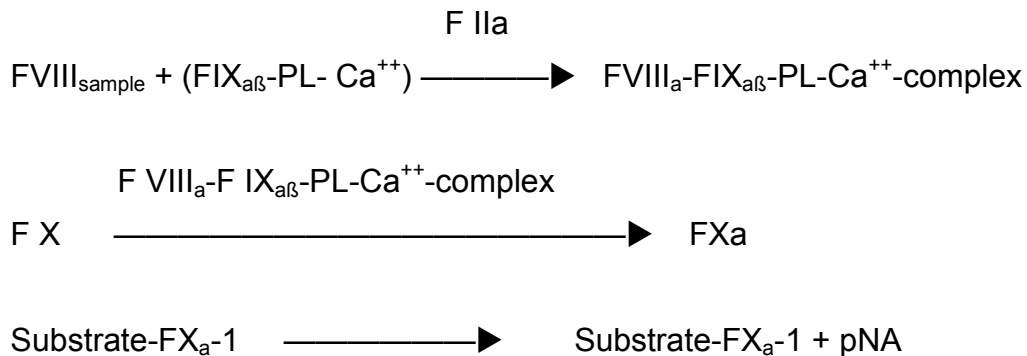
| Product | Description | REF | Package |
|---|---|---------|-----------|
| Factor VIII deficient plasma | Lyophilized Factor VIII deficient plasma, immunodepleted | 5154002 | 5 x 1 ml |
| | | 5154004 | 50 x 1 ml |
| Factor IX deficient plasma | Lyophilized Factor VIII deficient plasma, native | 5154007 | 5 x 1 ml |
| | | 5154016 | 50 x 1 ml |
| | Lyophilized Factor IX deficient plasma, immunodepleted | 5164003 | 5 x 1 ml |
| | | 5164004 | 50 x 1 ml |
| Factor IX deficient plasma | Lyophilized Factor IX deficient plasma, native | 5164008 | 5 x 1 ml |
| | | 5164016 | 50 x 1 ml |
| Factor XI deficient plasma | Lyophilized Factor XI deficient plasma, native | 5184004 | 5 x 1 ml |
| Factor XII deficient plasma | Lyophilized Factor XII deficient plasma, native | 5194008 | 5 x 1 ml |
| Fitzgerald Trait Plasma | Lyophilized high molecular weight kininogen deficient plasma, immunodepleted | 5204006 | 2 x 1 ml |
| Fletcher Trait Plasma | Lyophilized prekallikrein deficient plasma, native | 5205006 | 2 x 1 ml |
| Auxiliary reagent equired and not supplied with the kit | | | |
| Imidazole Buffer | Dilution buffer for use in factors VIII, IX, XI, XII and factor VIII Inhibitor, Protein C and Fibrinogen. | 5410008 | 20 ml |
| | | 5410007 | 9 x 20 ml |
| CaCl₂ 50 mM | Dilution buffer for determination of Fitzgerald and Fletcher Trait Plasma in clotting method. | 5279027 | 20 ml |

FACTOR ASSAYS

Chromogenic FVIII

The **TECHNOCHROM® FVIII:C** is a kit for the determination of coagulation factor VIII activity in plasma and factor VIII concentrates by measuring factor Xa generation with a chromogenic substrate. The kit shows an excellent correlation with one and two stage Factor VIII assays and a linear calibration curve between 0 and 130%. It contains all components and is insensitive to heparin up to 10 IU/mL.

Test Principle:

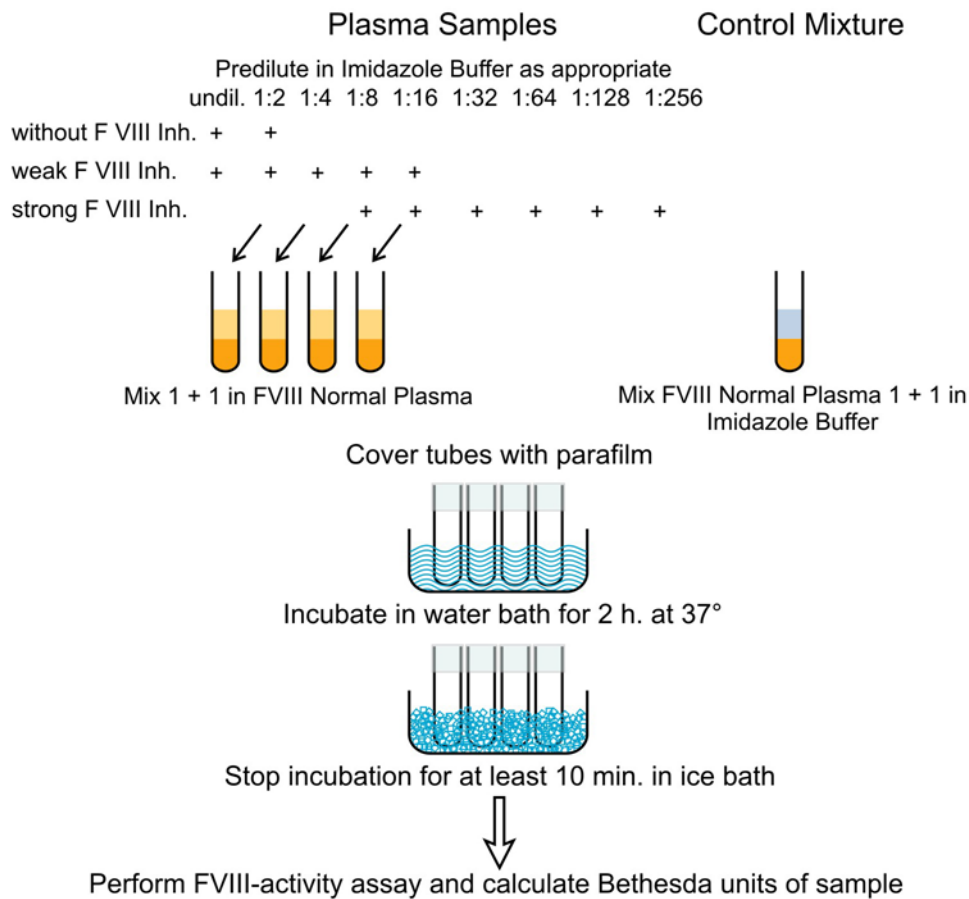


| Product | Description | REF | Package |
|---|---|---------|------------|
| TECHNOCHROM® FVIII:C | 2 x 2 ml Substrate 2 x 2 ml Reagent A 2 x 2 ml Reagent B 4 x 1 ml Reference Standards FVIII (1-4) 3 x 30 ml FVIII Dilution Buffer 2 x 8 ml FVIII Reaction Buffer | 5344101 | ~ 40 tests |
| TECHNOCHROM® FVIII:C for Ceveron® alpha | 2 x 2 ml Substrate 2 x 2 ml Reagent A 2 x 2 ml Reagent B 4 x 1 ml Reference Standards FVIII (1-4) 2 x 20 ml FVIII Dilution Buffer 2 x 8 ml FVIII Reaction Buffer | 5344103 | ~ 80 tests |

FACTOR ASSAYS

Factor VIII Inhibitor Assay (Bethesda Units)

The **Factor VIII Inhibitor Kit** is a kit for the determination of Factor VIII Inhibitor according to Bethesda with improved specificity in the lower range of antibody detection due to dilution with buffered normal FVIII plasma (1 I.U.FVIII/ml). The kits contains a Factor VIII Inhibitor Plasma as positive control and a Factor VIII Inhibitor free plasma as negative control. Calculation Software (Excel) is available from www.technoclone.com.

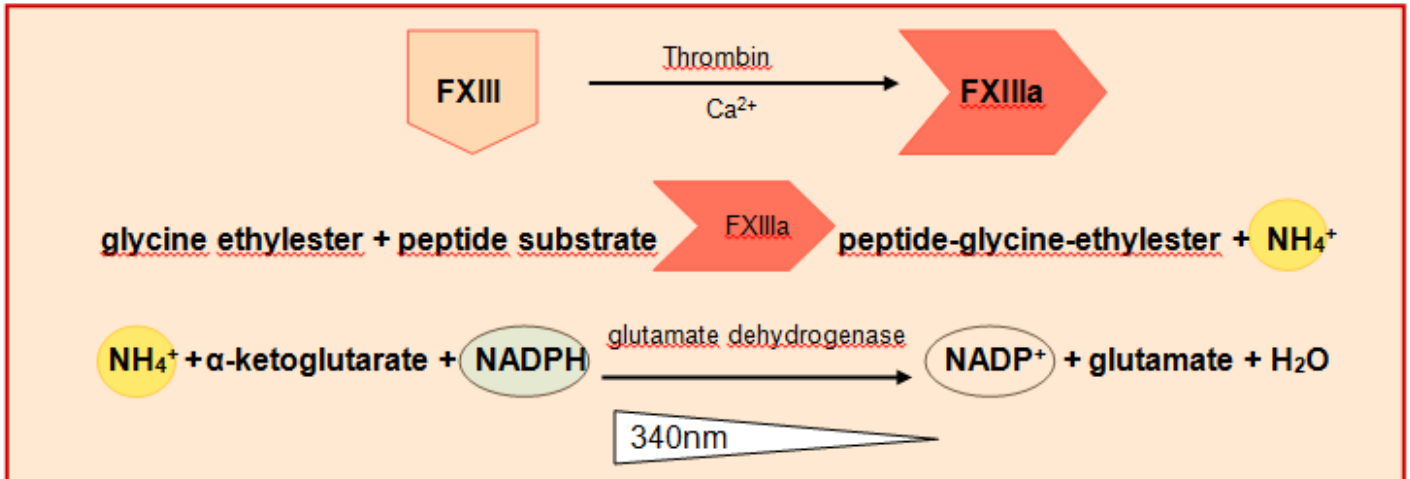


| Product | Description | REF | Package |
|--|---|---------|-------------|
| FVIII Inhibitor Kit | 2 x ~ 3 ml Factor VIII Normal Plasma 1 x 1 ml F VIII Inhibitor Plasma 1 x 1 ml Inhibitor Free Plasma 1 x 17 ml Imidazole Buffer | 5152005 | ~ 2-4 tests |
| FVIII Inhibitor Kit HCV neg. | 2 x ~ 3 ml Factor VIII Normal Plasma 1 x 1 ml F VIII Inhibitor Plasma HCV neg. 1 x 1 ml Inhibitor Free Plasma 1 x 17 ml Imidazole Buffer | 5152009 | ~ 2-4 tests |
| Controls | | | |
| FVIII Inhibitor Plasma | Native Factor VIII Inhibitor plasma for control of FVIII Inhibitor determination | 5159008 | 5 x 1 ml |
| FVIII Inhibitor Plasma HCV neg. | Factor VIII Inhibitor plasma for control of FVIII Inhibitor determination | 5159010 | 5 x 1 ml |

FACTOR ASSAYS

Factor XIII

Factor XIII or **fibrin stabilizing factor** is an enzyme of the blood coagulation system that crosslinks fibrin. Factor XIII is a transglutaminase that circulates in the plasma as a heterotetramer of two catalytic A subunits and two carrier B subunits.



TECHNOCHROM[®] FXIII

Enzymatic reagent kit for the determination of FXIII activity to detect inherited or acquired FXIII deficiencies, abnormal FXIII with decreased activity and elevated FXIII level.

| Product | Description | REF | Package |
|--------------------------------|---|---------|----------|
| Factor XIII deficient plasma | Lyophilized Factor XIII deficient plasma, immunodepleted | 5194104 | 5 x 1 ml |
| TECHNOCHROM [®] FXIII | 3 x 3 ml FXIII Activator Reagent 3 x 3 ml FXIII Detection Reagent 3 x 3 ml FXIII NADH 3 x 1 ml FXIII Inhibitor Reagent 1 x 6 ml Stabilizer Solution | 5360010 | 3 x 3 ml |

FACTOR ASSAYS

von Willebrand Factor (vWF)

There are 3 main types of von Willebrand Disease (vWD)

- partially reduced levels of vWF (type 1)
- almost completely reduced levels of vWF (type 3)
- defects in the vWF molecule (type 2)

For Diagnosis of von Willebrand disease a combination of two types of methods (vWF:Antigen and vWF Function) is used:

vWF: Antigen

ELISA

Latex Assay

vWF: Function

Ristocetin Cofactor Test

Collagen Binding ELISA (CBA)

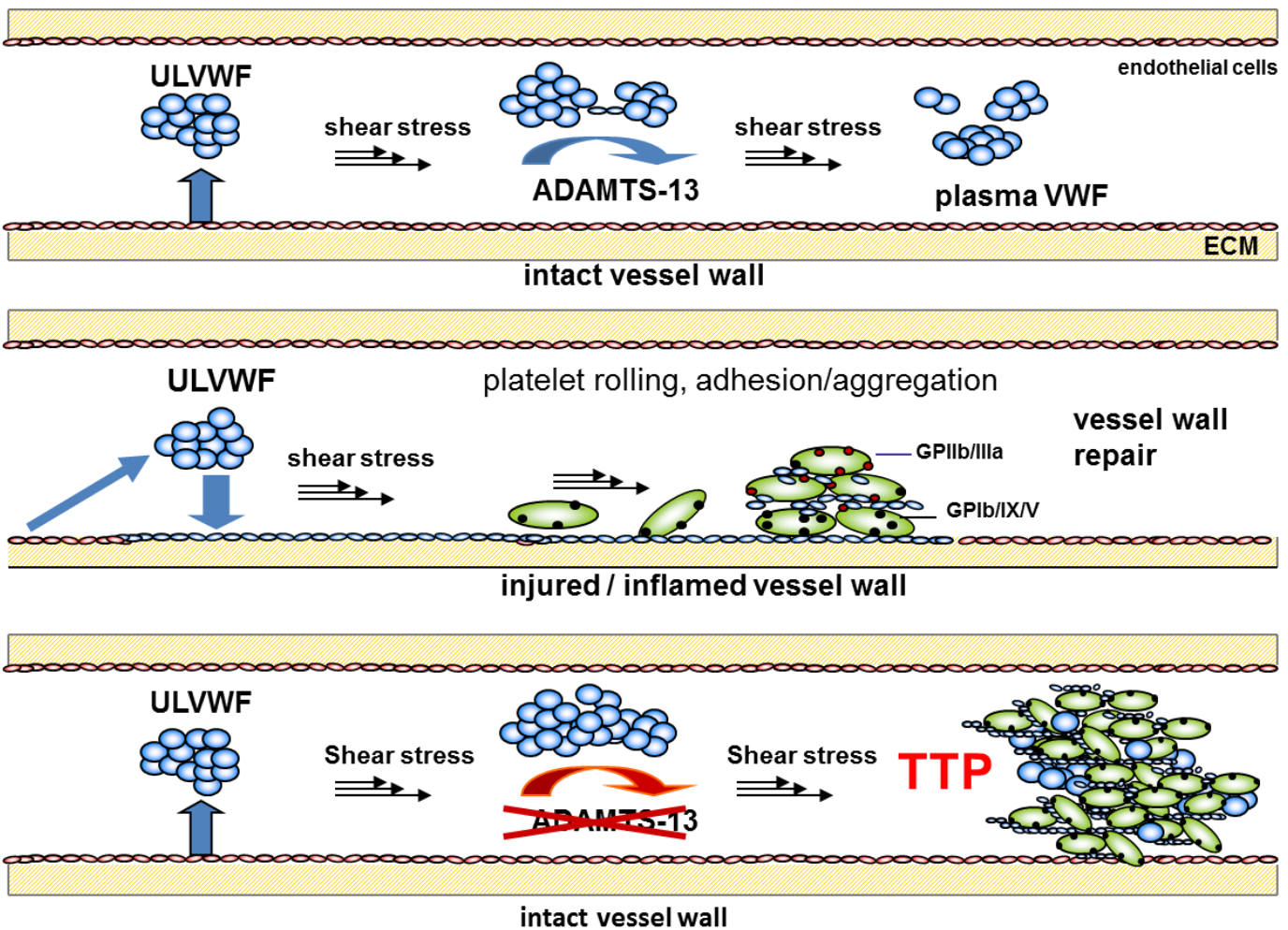
Latex Assay

| Product | Description | REF | Package |
|--|--|---------|------------|
| TECHNOZYM® vWF:Ag ELISA Kit | 12 x 8 anti-vWF strips 1 x 0.3 ml anti-vWF Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450201 | 96 tests |
| TECHNOZYM® vWF:CBA ELISA Kit | 12 x 8 Collagen TypeIII strips 1 x 0.3 ml anti-vWF Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450301 | 96 tests |
| TECHNOZYM® vWF:CBA ELISA Kit Collagen Type I | 12 x 8 Collagen Type I strips 1 x 0.3 ml anti-vWF Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450311 | 96 tests |
| TECHNOZYM® vWF:CBA ELISA Kit Collagen Type VI RUO | 12 x 8 Collagen Type VI strips 1 x 0.3 ml anti-vWF Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450321 | 96 tests |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® vWF:Ag Calibrator Set | Additional calibrator set for TECHNOZYM® vWF:Ag | 5450210 | 5 x 0.5 ml |
| TECHNOZYM® vWF:Ag Control Set | Additional high and low control for TECHNOZYM® vWF:Ag | 5450212 | 2 x 0.5 ml |
| TECHNOZYM® vWF:CBA Calibrator Set | Additional calibrator set for TECHNOZYM® vWF:CBA | 5450310 | 5 x 0.5 ml |
| TECHNOZYM® vWF:CBA Control Set | Additional high and low control for TECHNOZYM® vWF:CBA | 5450312 | 2 x 0.5 ml |

ADAMTS-13

ADAMTS-13 (a disintegrin and metalloprotease with thrombosspondin type 1 motif 13) is an enzyme (vWF-cleaving protease or vWF-CP) that specifically cleaves unusually large von Willebrand factor (vWF) multimers, which induce platelet thrombus formation under high shear stress conditions. If the activity of ADAMTS13 is lowered for some reason, unusually large vWF multimers may accumulate within blood causing thrombosis due to platelet aggregation, which in turn may lead to TTP (thrombotic thrombocytopenic purpura).

ADAMTS-13 Function:



Thrombotic microangiopathy, abbreviated as **TMA**, is a pathologic state which results in thrombosis in capillaries and arterioles, due to an endothelial injury. It may be seen in association with thrombocytopenia, anemia, purpura and renal failure.

The classic TMAs are acquired hemolytic uremic syndrome (aHUS) and thrombotic thrombocytopenic purpura (TTP).

≤ 5 % ADAMTS-Activity
TTP

≥ 5 % ADAMTS-Activity
aHUS

FACTOR ASSAYS

ADAMTS-13 Chromogenic ELISAs

TECHNOZYM® ADAMTS-13 Activity ELISA Kit is a chromogenic ELISA for the determination of ADAMTS-13 activity in human plasma.

TECHNOZYM® ADAMTS-13 Antigen ELISA Kit is a chromogenic ELISA for the determination of ADAMTS-13 antigen in human plasma.

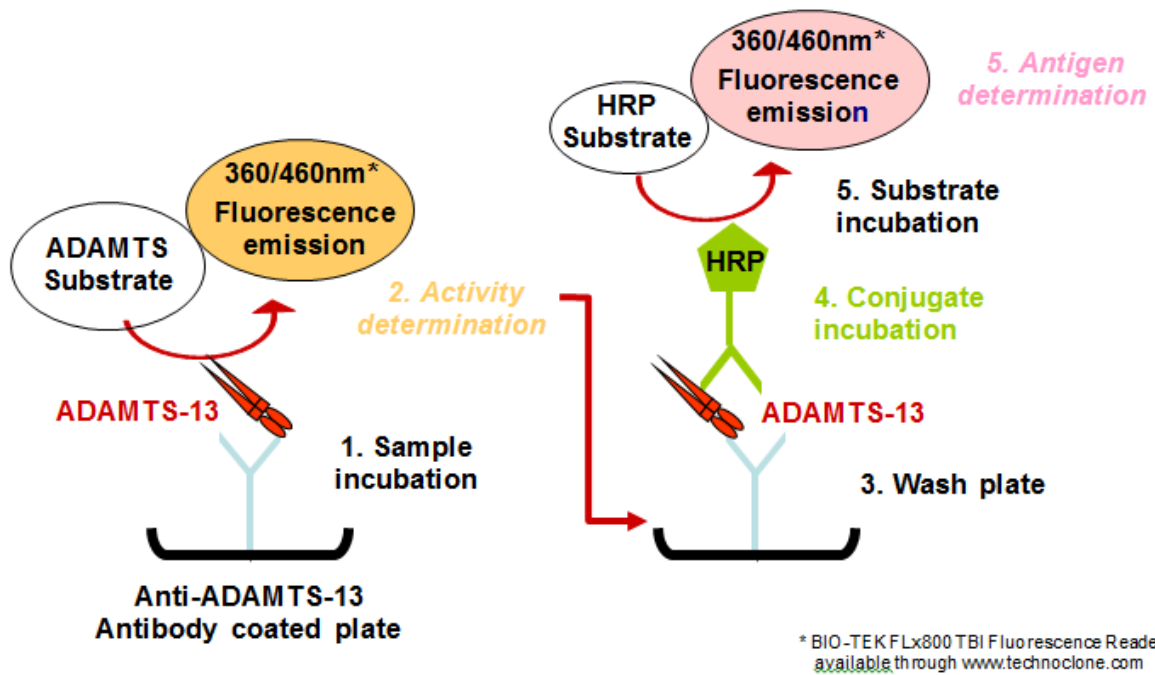
TECHNOZYM® ADAMTS-13 INH ELISA Kit is a chromogenic ELISA for the determination of ADAMTS-13 auto-antibodies for the diagnosis of TTP. Antibodies against ADAMTS-13, the enzyme that cleaves von Willebrand Factor, are an important cause of TTP.

| Product | Description | REF | Package |
|---|--|--------------------|----------------------|
| TECHNOZYM® ADAMTS-13 Activity ELISA | 12 x 8 anti GST strips 1 x 12 ml HRP Conjugate 1 x 30 ml Reaction Buffer 1 x 53 ml Wash Buffer Concentrate 1 x 12 ml TMB Substrate 2 x 6 ml GST-vWF73 Substrate 1 x 12 ml Stop Solution 8 x 0.5 ml Calibrators and Controls | 5450701 | 96 tests |
| TECHNOZYM® ADAMTS-13 Antigen ELISA | 12 x 8 anti ADAMTS-13 strips 1 x 0.3 ml anti-ADAMTS-13 Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450601 | 96 tests |
| TECHNOZYM® ADAMTS-13 INH ELISA | 12 x 8 rec. ADAMTS-13 strips 1 x 0.3 ml anti-IgG Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | 5450401 5450451 | 96 tests 48 tests |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® ADAMTS-13 Activity CAL Set | Additional calibrator set for TECHNOZYM® ADAMTS-13 Activity | 5450761 | 6 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 Activity CONT Set | Additional high and low control for TECHNOZYM® ADAMTS-13 Activity | 5450763 | 2 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 Antigen CAL Set | Additional calibrator set for TECHNOZYM® ADAMTS-13 Antigen | 5450661 | 5 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 Antigen CONT Set | Additional high and low control for TECHNOZYM® ADAMTS-13 Antigen | 5450663 | 2 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 INH CAL Set | Additional calibrator set for TECHNOZYM® ADAMTS-13 INH | 5450461 | 5 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 INH CONT Set | Additional high and low control for TECHNOZYM® ADAMTS-13 INH | 5450463 | 2 x 0.5 ml |

ADAMTS-13 fluorogenic ELISA

TECHNOZYM® ADAMTS-13 Activity/Antigen ELISA Kit is a fluorogenic ELISA for the determination of ADAMTS-13 activity and antigen in plasma. ADAMTS-13 is the enzyme that cleaves vWF under shear stress condition. A failure of function of this enzyme leads to unusually large vWF multimers and increased platelet aggregation.

Test Principle:



Applications and an evaluation software can be downloaded from the website www.technoclone.com.

| Product | Description | REF | Package |
|---|---|---------|--------------|
| TECHNOZYM ADAMTS-13 Activity/Antigen ELISA Kit | 12/6 x 8 anti-ADAMTS-13 strips | | |
| | 1 x 0.3 ml anti-ADAMTS-13 Conjugate | | |
| | 1 x 80 ml Wash Buffer Concentrate | | |
| | 1 x 90 ml Incubation Buffer | 5450501 | 2 x 48 tests |
| | 2/1 x 3 ml Activity Substrate | 5450551 | 48 tests |
| | 1 x 6 ml Antigen Substrate | | |
| | 1 x 0.7 ml Stable Peroxidase Solution | | |
| | 1 x 6 ml Stop Solution | | |
| | 7 x 0.5 ml Calibrators and Controls | | |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® ADAMTS-13 Activity/Antigen Calibrator Set | Additional calibrator set for TECHNOZYM® ADAMTS-13 Activity and Antigen | 5450561 | 5 x 0.5 ml |
| TECHNOZYM® ADAMTS-13 Activity/Antigen Control Set | Additional high and low control for TECHNOZYM® ADAMTS-13 Activity and Antigen | 5450563 | 2 x 0.5 ml |

ANTICOAGULANT TREATMENTS

Overview

An **anticoagulant** is a substance that prevents coagulation (clotting) of blood. Such substances occur naturally in leeches and blood-sucking insects. Various groups of anticoagulants are available to clinicians for the prevention and treatment of deep vein thrombosis, pulmonary embolism, myocardial infarction and stroke. Anticoagulants reduce blood clotting.

These treatments are characterised by different targets, mechanisms of action, pharmacokinetic profiles and varying pathological states. Their monitoring requires the use of specific assays and calibrators and controls.

| ANTICOAGULANT TREATMENT | ASSAYS | TECHNOCHROM® anti Xa | TECHNOCLOT® DTI | TECHNOCLOT® PT |
|--|-------------------------|----------------------|-----------------|----------------|
| Apixaban | | | | |
| | TECHNOVIEW® Apixaban | ✓ | | |
| Argatroban | | | | |
| | TECHNOVIEW® Argatroban | | ✓ | |
| Arixtra | | | | |
| | TECHNOVIEW® Arixtra | ✓ | | |
| Dabigatran | | | | |
| | TECHNOVIEW® Dabigatran | | ✓ | |
| LMWH (Low Molecular Weight Heparin) | | | | |
| | TECHNOVIEW® LMW | ✓ | | |
| Orgaran | | | | |
| | TECHNOVIEW® Orgaran | ✓ | | |
| Rivaroxaban | | | | |
| | TECHNOVIEW® Rivaroxaban | ✓ | | |
| UFH (Unfractionated Heparin) | | | | |
| | TECHNOVIEW® UFH | ✓ | | |
| Warfarin/Coumarin (INR/Quick) | | | | |
| | AK Calibrant | | | ✓ |
| | Coagulation Control AK | | | ✓ |

ANTICOAGULANT TREATMENTS

Anti-Xa Assay

TECHNOCHROM® anti-Xa is a system of reagents for the chromogenic determination of direct and indirect Xa inhibitors in human citrated plasma. The assay is based on the inhibition of activated factor X (FXa) as measured by a chromogenic FXa substrate.

| Product | Description | REF | Package |
|-----------------------------|--|---------|------------|
| TECHNOCHROM® anti-Xa | 1 x 20 ml R1 anti-Xa Buffer 1 x 4 ml R2 bovine Factor Xa 1 x 4 ml R3 Substrate | 5340250 | ~ 80 tests |

Calibrators & Controls

The *TECHNOVIEW Calibrator* and *Control Plasma Sets* listed below are plasmas for calibration and quality control of the corresponding anticoagulant measurement, titrated and optimised using the **TECHNOCHROM® anti-Xa**.

| Product | Description | REF | Package |
|--------------------------------|--|---------|----------|
| TECHNOVIEW® Apixaban | Calibrator Set of 5 calibrators (~ 0-500 ng/ml) | 5090269 | 5 x 1 ml |
| | Low Control (~ 120 ng/ml) | 5090271 | 5 x 1 ml |
| | High Control (~ 300 ng/ml) | 5090270 | 5 x 1 ml |
| TECHNOVIEW® Arixtra | Calibrator Set of 5 calibrators (~ 0-2 µg/ml) | 5090010 | 5 x 1 ml |
| | Low Control (~ 0.5 µg/ml) | 5090012 | 6 x 1 ml |
| | High Control (~ 1.5 µg/ml) | 5090014 | 6 x 1 ml |
| TECHNOVIEW® LMW Heparin | Calibrator Set of 5 calibrators (~ 0-1.8 U/ml) | 5090040 | 5 x 1 ml |
| | Low Control (~ 0.4 U/ml) | 5090042 | 5 x 1 ml |
| | Medium Control (~ 0.9 U/ml) | 5090044 | 5 x 1 ml |
| | High Control (~ 1.3 U/ml) | 5090046 | 5 x 1 ml |
| TECHNOVIEW® Orgaran | Calibrator Set of 5 calibrators (~ 0-1.6 U/ml) | 5090110 | 5 x 1 ml |
| | Low Control (~ 0.5 U/ml) | 5090112 | 5 x 1 ml |
| | High Control (~ 1.0 U/ml) | 5090114 | 5 x 1 ml |
| TECHNOVIEW® Rivaroxaban | Calibrator Set of 5 calibrators (~ 0-150 ng/ml) | 5090170 | 5 x 1 ml |
| | Calibrator High Set of 5 calibrators (~ 0-500 ng/ml) | 5090171 | 5 x 1 ml |
| | Low Control (~ 60 ng/ml) | 5090172 | 5 x 1 ml |
| | Medium Control (~ 120 ng/ml) | 5090173 | 5 x 1 ml |
| | High Control (~ 300 ng/ml) | 5090174 | 5 x 1 ml |
| TECHNOVIEW® UFH | Calibrator Set of 5 calibrators (~ 0-1.5 U/ml) | 5090070 | 5 x 1 ml |
| | Low Control (~ 0.2 U/ml) | 5090072 | 5 x 1 ml |
| | High Control (~ 0.5 U/ml) | 5090074 | 5 x 1 ml |

ANTICOAGULANT TREATMENTS

Direct Thrombin Inhibitor (DTI) Assay

TECHNOCLOT® DTI (direct thrombin inhibitor) is a system of reagents for the clotting determination of direct thrombin inhibitors in plasma.

| Product | Description | REF | Package |
|------------------------|--|---------|----------------|
| TECHNOCLOT® DTI | 1 x 1 ml R1 Normal Plasma 1 x 2 ml R2 DTI Reagent | 5100025 | ~ 2 x 20 tests |

Calibrators & Controls

The *TECHNOVIEW Calibrator and Control Plasma Sets* listed below are plasmas for calibration and quality control of the corresponding anticoagulant measurement, titrated and optimised using the **TECHNOCLOT® DTI**.

| Product | Description | REF | Package |
|-------------------------------|--|---------|----------|
| TECHNOVIEW® Argatroban | Calibrator Set of 5 calibrators (~ 0-2 µg/ml) | 5090140 | 5 x 1 ml |
| | Low Control (~ 0.7 µg/ml) | 5090142 | 5 x 1 ml |
| | High Control (~ 1.2 µg/ml) | 5090144 | 5 x 1 ml |
| TECHNOVIEW® Dabigatran | Calibrator Set of 4 calibrators (~ 50-500 ng/ml) | 5090210 | 4 x 1 ml |
| | Low Control (~ 150 ng/ml) | 5090214 | 5 x 1 ml |
| | High Control (~ 300 ng/ml) | 5090212 | 5 x 1 ml |

Warfarin Monitoring (INR)

For **TECHNOCLOT® PT** reagents see page 3.

Calibrators & Controls

AK-Calibrant is a calibration set containing 4 calibration plasmas for PT standardization. One normal plasma and 3 native warfarin plasmas (PIVKA) of different levels for INR calibration.

- For generation of INR reference curves and direct INR determination.
- Determination of the laboratory specific ISI-values and MNPT.
- Generation of reference curves in percentage of norm.

Coagulation Control AK is a Control plasma for use as an accuracy control for oral anticoagulant therapy monitoring. The plasma is prepared from donors who had been on long-term anticoagulant therapy and therefore contains PIVKA proteins. The plasma is externally calibrated for most PTs.

| Product | Description | REF | Package |
|-------------------------------|--|---------|-----------|
| AK-Calibrant | Calibrator Set of 4 calibrators (~ 1- 4 INR) | 5010004 | 4 x 1 ml |
| Coagulation Control AK | Control Plasma (~ 2.5 INR) | 5011050 | 5 x 1 ml |
| | | 5011060 | 50 x 1 ml |

Antithrombin (AT)

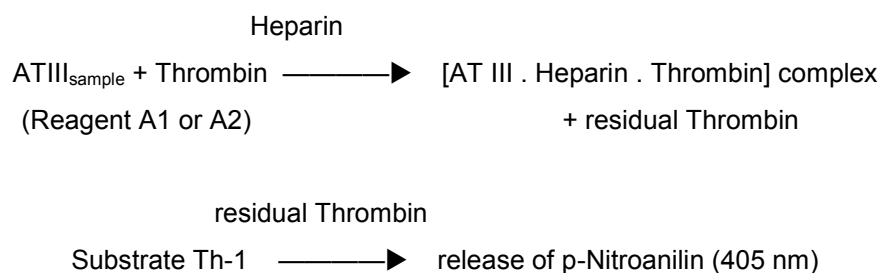
Antithrombin (AT, formerly called ATIII, also known as heparin cofactor I) is a natural anticoagulant that inhibits the activated coagulation factors thrombin (factor IIa), factor Xa, and, to a lesser extent, factor XIa and factor IXa.

TECHNOCHROM® AT III are reagents for the chromogenic and quantitative determination of AT activity in human plasma.

The **TECHNOCHROM® AT III Kits** are a complete reagent kits suitable for the chromogenic determination of ATIII on analyzers and for the manual method.

The **TECHNOCHROM® AT III modular reagents** are a system of reagents for the chromogenic determination optimized for the manual method (Reagent A1, Th-1 and Buffer A1) and different types of analyzers (Reagent A2 and Reagent Th-1).

Test Principle:



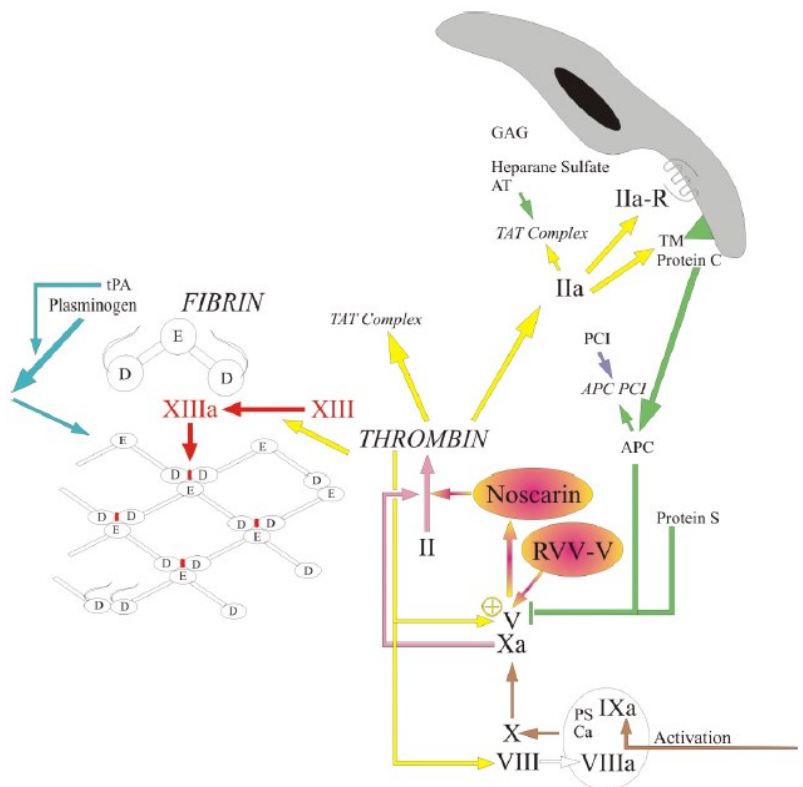
| Product | Description | REF | Package |
|--|---|--------------------|-----------------------------|
| TECHNOCHROM® AT III Kit | Suitable for the photometric method 1 x 43 IU ATIII Reagent A2 1 x 10 µmol ATIII Reagent Th-1 | 5340224 | ~ 100 tests |
| TECHNOCHROM® AT III manual method Kit | Suitable for the manual method 1 x 20 µmol ATIII Reagent A1 1 x 10 µmol ATIII Reagent Th-1 | 5340225 | ~ 39 tests |
| Modular reagents | | | |
| TECHNOCHROM® AT III modular A1 | For use in combination with TECHNOCHROM® AT III modular Th-1 | 5340212 5340214 | 2 x 6.5 IU 20 x 6.5 IU |
| TECHNOCHROM® AT III modular A2 | For use in combination with TECHNOCHROM® AT III modular Th-1 | 5340217 5340219 | 2 x 43 IU 20 x 43 IU |
| TECHNOCHROM® AT III modular Th-1 | For use in combination with TECHNOCHROM® AT III modular A1 or A2 | 5340011 5340016 | 2 x 10 µmol 20 x 10 µmol |
| TECHNOCHROM® AT III modular Buffer | For use in combination with TECHNOCHROM® AT III modular A1 and Th-1. | 5340221 | 100 ml |

THROMBOPHILIA

Activated Protein C (APC)

Activated protein C (APC) is a potent natural anticoagulant that acts by cleaving and thus inactivating the activated forms of factor V and factor VIII (factors Va and VIIIa). Factor V Leiden results from a point mutation that causes an amino acid change (an arginine to glutamine substitution) at position 506 in factor V. This abolishes a cleavage site of APC, making the molecule less susceptible to inactivation.

Based on the observation that the anticoagulant activity of APC was reduced in a modified activated partial thromboplastin time (aPTT) assay, this defect was initially termed "APC resistance."



In contrast to traditional APC Resistance Test the **APC Resistance Kit** from Technoclone acts on the prothrombinase complex level. Its reliability is enhanced by the elimination of possible preceding interferences by factors upstream within from the coagulation cascade and due to its independence from Ca^{2+} .

Coagulation is triggered by the addition of a FV dependent prothrombin activator from snake venom „Noscarin“ from *Notechis scutatus scutatus* in the absence of calcium. The time required for clot information is recorded.

| Product | Description | REF | Package |
|---------------------------|------------------------------------|---------|-------------|
| APC Resistance Kit | 3 x 2 ml R1 APC/RVV-V(+APC) | 5344510 | ~ 120 tests |
| | 3 x 2 ml R2 RVV-V (-APC) | | |
| | 3 x 4 ml R3 PTA Reagent | | |
| | 3 x 2 ml R4 Dilution plasma | | |
| | 1 x 1 ml FV-L Negative Control | | |
| | 1 x 1 ml FV-L Heterozygous Control | | |
| APC Resistance Kit | 1 x 2 ml R1 APC/RVV-V(+APC) | 5344515 | ~ 40 tests |
| | 1 x 2 ml R2 RVV-V (-APC) | | |
| | 1 x 4 ml R3 PTA Reagent | | |
| | 1 x 2 ml R4 Dilution plasma | | |
| | 1 x 1 ml FV-L Negative Control | | |
| | 1 x 1 ml FV-L Heterozygous Control | | |
| Controls | | | |
| APC Control Kit | 1 x FV-L Negative Control C1 | 5344512 | 2 x 1 ml |
| | 1 x FV-L Heterozygous Control C2 | | |

THROMBOPHILIA

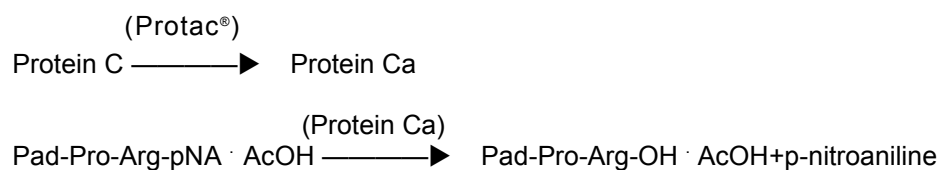
Protein C (PC)

Protein C is a vitamin K dependent serine protease which, when activated, inhibits coagulation by inactivating the clotting factors V/Va and VIII/VIIIa. Additionally, protein C has been shown to have profibrinolytic activity. Hereditary, heterozygous protein C deficiency has been found to be associated with an increased risk of venous thrombosis and hereditary, homozygous total protein C deficiency has been found in neonates with purpura fulminans. Reduced levels of protein C have been found in association with vitamin K deficiency and during coumarin therapy.

TECHNOCHROM® Protein C

Is an enzymatic reagent kit for the determination of Protein C (PC) activity.

Test Principle:



TECHNOCLOT® Protein C

Is a reagent kit for the clotting determination of Protein C (PC) activity.

TECHNOZYM® Protein C ELISA

The TECHNOZYM® PC ELISA allows the determination of Protein C (PC) antigen plasma levels in patients with thrombotic tendencies. The assay is a double polyclonal antibody “sandwich” assay.

| Product | Description | REF | Package |
|---------------------------------------|--|---------|------------|
| TECHNOCHROM® Protein C | 3 x 1 ml Substrate PCa-2 3 x 1 ml Protein C Activator 1 x 60 ml Protein C Buffer 3 x 1 ml Standards (~0.25-1.25 U/ml) | 5341013 | ~ 30 tests |
| TECHNOCLOT® Protein C | 2 x 1 ml Protein C depleted plasma 2 x 1 ml Protein C Activator 1 x 17 ml Imidazole Buffer | 5346200 | ~ 20 tests |
| TECHNOZYM® Protein C ELISA Kit | 12 x 8 anti PC strips 1 x 0.3 ml anti PC Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | TC12021 | 96 tests |

Modular reagents

| | | | |
|-----------------------------------|---|---------|------------|
| Protein C deficient Plasma | Lyophilized PC deficient plasma, immunodepleted | 5346806 | 2 x 1 ml |
| Substrate Pca-2 | Chromogenic Substrate for the determination of protein C | 5353011 | 2 x 6 µmol |
| Protac® | Protac®, a highly purified extract from the venom of the snake Agkistrodon Contortrix, is a fast and direct activator of Protein C. | 5346212 | 5 x 1 ml |
| Protein C Buffer | Buffer for the chromogenic determination of protein C activity | 5341052 | 60 ml |

THROMBOPHILIA

Protein S

Protein S (S for Seattle) is a vitamin K-dependent plasma glycoprotein synthesized in the endothelium. In the circulation, Protein S exists in two forms: a free form and a complex form bound to complement protein C4b-binding protein (C4BP). The best characterized function of Protein S is its role in the anti coagulation pathway, where it functions as a cofactor to Protein C in the inactivation of Factors Va and VIIIa. Only the free form has cofactor activity.

TECHNOCLOT® Protein S is a reagent kit for the quantitative determination of protein S activity in human plasma to detect inherited or acquired protein S deficiencies.

| Product | Description | REF | Package |
|---|---|---------|------------|
| TECHNOCLOT® Protein S NEW | 2 x 3 ml Protein S Reagent 2 x 1 ml Protein S deficient plasma | 5341030 | ~ 40 tests |
| Protein S deficient plasma | Lyophilized PS deficient plasma, immunodepleted | 5341031 | 2 x 1 ml |

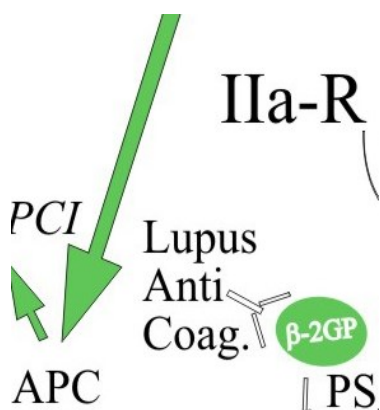
C1 Esterase Inhibitor

C1-Inhibitor (C1-INH, C1 esterase inhibitor) is a protease inhibitor belonging to the serpin superfamily. Its main function is the inhibition of the complement system to prevent spontaneous activation. C1-inhibitor is an acute-phase protein that circulates in blood at levels of around 0.25 g/L. The levels rise ~2-fold during inflammation. Although named after its complement inhibitory activity, C1-inhibitor also inhibits proteases of the fibrinolytic, clotting, and kinin pathways. C1-inhibitor is the most important physiological inhibitor of plasma kallikrein, FXIa, and FXIIa.

TECHNOCHROM® C1-Inhibitor is a reagent kit for the chromogenic determination of C1 esterase inhibitor (C1-INH). Defect in the synthesis of C1-INH leads to hereditary angioedema.

| Product | Description | REF | Package |
|----------------------------------|---|---------|------------|
| TECHNOCHROM® C1-Inhibitor | 1 x 3 ml Substrate 1 x 3 ml C1-Esterase 1 x 25 ml Sample Buffer A 1 x 20 ml Reaction Buffer B 1 x 1 ml Reference Plasma 2 x 1 ml Normal and Abnormal Control plasma | 5345003 | ~ 30 tests |

Lupus Anticoagulant (LA)



Lupus Anticoagulant (also known as lupus antibody, LA, or lupus inhibitors) is an immunoglobulin that binds to phospholipids and proteins associated with the cell membrane. Lupus anticoagulant is a misnomer as it is actually a prothrombotic agent.

Lupus Anticoagulants are considered to be a significant cause of recurrent miscarriages and life threatening venous clots.

Lupus Anticoagulants are phospholipid “interfering” antibodies, which prolong clotting tests that are responsive to procoagulant phospholipid concentration such as APTT and dRVVT. Lupus Anticoagulants are not corrected by mixing with normal plasma but may be corrected by the addition of phospholipid.

TECHNOCLOT® LA Screen and TECHNOCLOT® LA Confirm are simplified, one-stage Dilute Russel’s Viper Venom Time (dRVVT) tests, comprising a complete screening and confirmatory system for the detection of Lupus Anticoagulant.

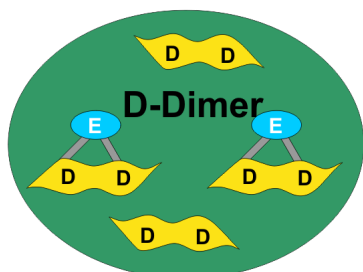
Lupus Anticoagulant Test is a modified activated partial thromboplastin time (aPTT) with an activator of SiO₂/Al₂O₃ suspension and two phospholipid concentrations. The modified aPTT’s are performed with normal plasma (free from platelet contamination), with patient plasma and with a mixture of both plasmas. From the shape of the “aPTT against plasma concentration” curve the probability of the presence of lupus inhibitor can be assessed.

| Product | Description | REF | Package |
|---------------------------------|---|---------|-----------|
| Lupus Anticoagulant Test | 1 x 3 ml Reagent A 2 x 3 ml Reagent B 2 x 2 ml Reagent C 1 x 1 ml Lupus Inhibitor Plasma Low | 5343005 | ~ 6 tests |
| TECHNOCLOT® LA Screen | Simplified screening (one-stage) dilute Russell’s Viper Venom (dRVV)Test | 5343012 | 5 x 2 ml |
| TECHNOCLOT® LA Confirm | Confirmatory simplified screening (one-stage) dilute Russell’s Viper Venom (dRVV)Test | 5343016 | 5 x 1 ml |

| Controls | | | |
|--|---|--------------------|----------------------|
| Lupus Inhibitor Plasma (positive) | Positive Control for determination of Lupus Inhibitor | 5343010 5343019 | 2 x 1 ml 5 x 1 ml |
| Lupus Inhibitor Plasma Low (positive) | Low Positive Control for determination of Lupus Inhibitor | 5343021 | 5 x 1 ml |
| Platelet Poor Plasma (negative) | Negative Control for determination of Lupus Inhibitor | 5343022 | 5 x 1 ml |

D-Dimer

D-Dimer is formed by Plasmin degradation of Factor XIIIa cross-linked Fibrin. Elevated D-Dimer levels are a key indicator of thrombotic events, indicating excess fibrinolysis, following activation of coagulation.



For exclusion diagnosis of

- ◆ Deep venous thrombosis
- ◆ Pulmonary embolism
- ◆ Disseminated intravascular
- ◆ Thrombolytic treatment
- ◆ Cancer diagnostics

In the **TechnoLEIA® D-Dimer Latex Kit** is for the quantitative determination of D-Dimer by “latex enhanced immunoassay”.

The **TECHNOZYM® D-Dimer ELISA Kit** is a complete sandwich ELISA for the quantitative determination of D-Dimer in plasma based on monoclonal antibodies.

| Product | Description | REF | Package |
|--------------------------------------|--|---------|-------------|
| TechnoLEIA® D-Dimer Latex Kit | 1 x 1 ml TechnoLEIA D-Dimer CAL 0 ng/ml | 4847200 | ~ 150 tests |
| | 1 x 1 ml TechnoLEIA D-Dimer CAL ~ 3000 ng/ml | | |
| | 1 x 8 ml Na-Chloride solution 0.9% | 4847210 | ~ 50 tests |
| | 1 x 12/4 ml TechnoLEIA D-Dimer Latex Reagent | | |
| | 1 x 21/7 ml TechnoLEIA D-Dimer Buffer | | |
| TECHNOZYM® D-Dimer ELISA Kit | 12 x 8 anti D-Dimer strips | 2599006 | 96 tests |
| | 1 x 0.3 ml anti D-Dimer Conjugate | | |
| | 1 x 80 ml Wash Buffer Concentrate | | |
| | 1 x 90 ml Incubation Buffer | | |
| | 1 x 12 ml TMB Substrate | | |
| | 1 x 12 ml Stop Solution | | |
| | 7 x 0.5 ml Calibrators and Controls | | |

Modular reagents

| | | | |
|--|---|---------|-----------|
| TechnoLEIA® D-Dimer Latex Reagent | Latex reagents. For use in combination with TechnoLEIA® D-Dimer Buffer | 4847220 | 2 x 12 ml |
| | | 4847238 | 5 x 4 ml |
| TechnoLEIA® D-Dimer Buffer | Reaction Buffer. For use in combination with TechnoLEIA® Latex Reagents | 4847222 | 2 x 21 ml |
| | | 4847240 | 5 x 7 ml |

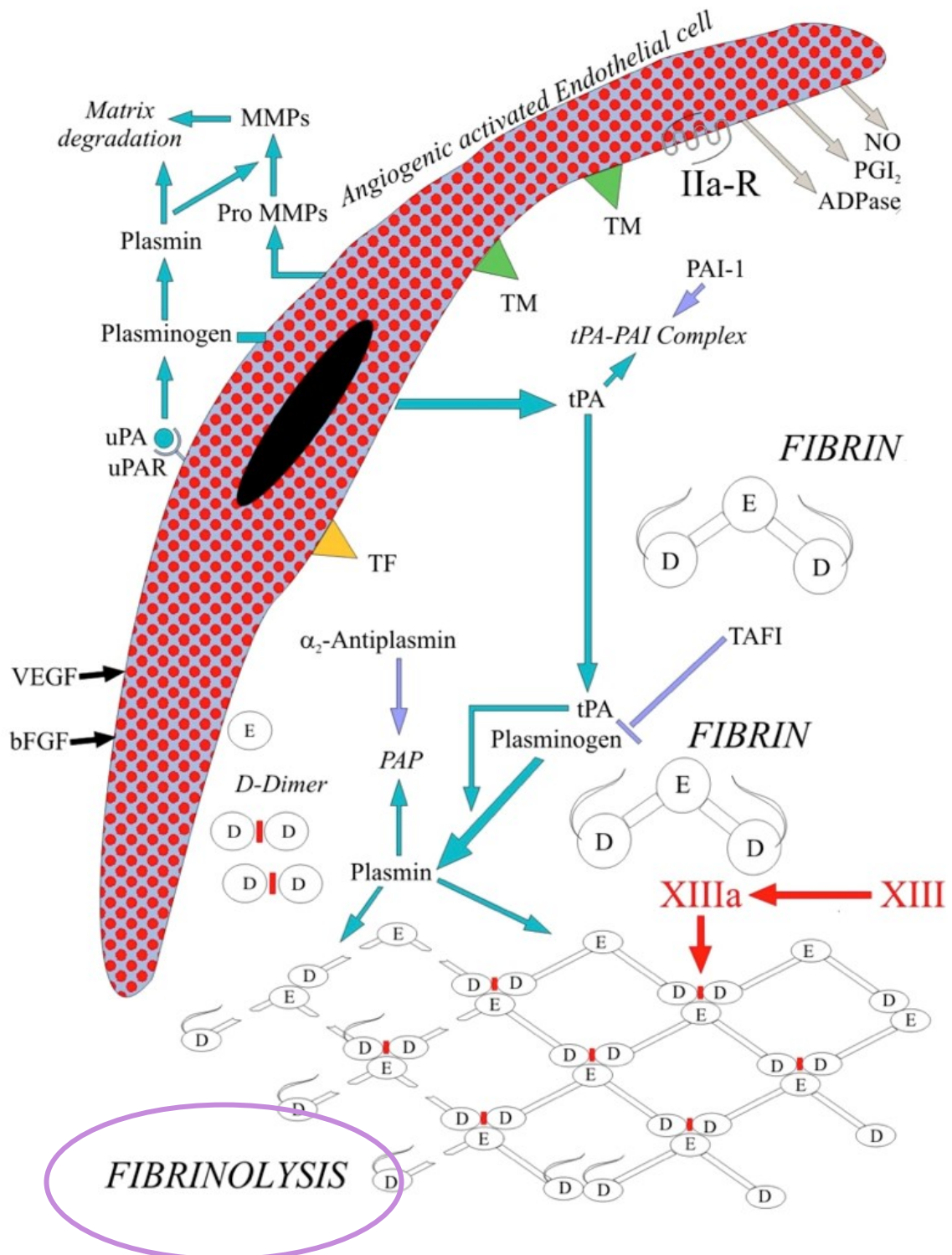
Calibrators & Controls

| | | | |
|---|---|---------|----------|
| TechnoLEIA® D-Dimer CAL~3000 ng/mL | Calibrator ~ 3000 ng/mL for the determination of D-Dimer. | 4847234 | 2 x 1 ml |
| TechnoLEIA® D-Dimer CAL 0 ng/mL | Calibrator 0 ng/mL for the determination of D-Dimer. | 4847236 | 2 x 1 ml |
| TechnoLEIA® D-Dimer Control high | High Control Serum (~ 2000 ng/mL) for accuracy and precision control in the determination of D-Dimer. | 4847230 | 5 x 1 ml |
| TechnoLEIA® D-Dimer Control low | Low Control Serum (~ 300 ng/mL) for accuracy and precision control in the determination of D-Dimer. | 4847232 | 5 x 1 ml |

FIBRINOLYSIS

Fibrinolysis is a process that prevents blood clots from growing and becoming problematic. In fibrinolysis, a fibrin clot, the product of coagulation, is broken down. Its main enzyme plasmin cuts the fibrin mesh at various places, leading to the production of circulating fragments that are cleared by other proteases or by the kidney and liver.

“Back in 1987 the founding idea of Technoclone was to create a channel through which the latest laboratory research advances in the field of fibrinolysis could be efficiently transferred to the clinical diagnostic setting.”
Technoclone Product Catalog 1989



Tissue-Plasminogen Activator (t-PA)

Tissue-Plasminogen Activator (t-PA) is a protein involved in the breakdown of blood clots. It is a serine protease found on endothelial cells, the cells that line the blood vessels. As an enzyme, it catalyzes the conversion of plasminogen to plasmin, the major enzyme responsible for clot breakdown. Because it works on the clotting system, tPA is used in clinical medicine to treat embolic or thrombotic stroke. Use is contraindicated in hemorrhagic stroke and head trauma.

TECHNOZYM® t-PA EDTA ELISA Kit

A highly sensitive sandwich ELISA for the quantitative determination of t-PA in human plasma. Suitable also for monitoring t-PA levels during thrombolytic therapy. The assay is a sandwich ELISA employing two monoclonal antibodies. The system detects both complexed and uncomplexed t-PA. The detection limit is 1 ng/mL. The assay is standardized against an International standard. Assay time is 2.5 hours. Kit contents include calibrators, high and low controls, coated plate, peroxidase-labeled antibody, buffers and ready to use TMB substrate. The sample buffer contains EDTA for increased recovery of t-PA in normal samples.

TECHNOZYM® t-PA Combi Actibind® ELISA Kit

A highly sensitive ELISA system for the combined quantitative determination of antigen concentration and activity of t-PA in human plasma. TECHNOZYM® t-PA Combi Actibind® ELISA Kit employs a capture antibody which does not interfere with t-PA functional activity. Following the binding of t-PA contained in the sample by this antibody, t-PA functional activity is determined using chromogenic plasmin substrate. After measuring the functional activity, bound t-PA antigen is detected using a peroxidase-labeled monoclonal anti t-PA antibody which recognizes both complexed and uncomplexed t-PA.

| Product | Description | REF | Package |
|---|--|---------|------------|
| TECHNOZYM® t-PA EDTA ELISA Kit | 12 x 8 anti t-PA strips 1 x 0.3 ml anti t-PA Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 1 x 20 ml Dilution Buffer 7 x 0.5 ml Calibrators and Controls | TC12007 | 96 tests |
| TECHNOZYM® t-PA Combi Actibind® ELISA Kit RUO | 12 x 8 anti t-PA strips 1 x 0.3 ml anti t-PA Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 1 x 0.5 ml Standard t-PA 1 x 20 ml Detection Buffer 1 x 20 ml Detection mixture | TC16000 | 96 tests |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® t-PA Calibrator Set | Additional 5 calibrators for TECHNOZYM® t-PA EDTA ELISA | TC12001 | 5 x 0.5 ml |
| TECHNOZYM® t-PA Control Set | Additional high and low control for TECHNOZYM® t-PA EDTA ELISA | TC12003 | 2 x 0.5 ml |

Urokinase-type Plasminogen Activator (u-PA)

Urokinase-type plasminogen activator (uPA), is a serine protease. It was discovered in 1947. Urokinase was originally isolated from human urine, but is present in several physiological locations, such as blood stream and the extracellular matrix. The primary physiological substrate is plasminogen, which is an inactive form (zymogen) of the serine protease plasmin. Activation of plasmin triggers a proteolysis cascade that, depending on the physiological environment, participates in thrombolysis or extracellular matrix degradation. This links urokinase to vascular diseases and cancer. The most important inhibitors of urokinase are the serpins plasminogen activator inhibitor-1 (PAI-1) and plasminogen activator inhibitor-2 (PAI-2), which inhibit the protease activity irreversibly. In the extracellular matrix, urokinase is tethered to the cell membrane by its interaction to the urokinase receptor.

TECHNOZYM® u-PA ELISA Kit

A highly sensitive sandwich ELISA for the quantitative determination of u-PA in human plasma and tissue extracts. The u-PA ELISA Kit is based on a monoclonal antibody used as a catching antibody and a second monoclonal peroxidase-labeled detecting antibody. Double and single chain urokinase can be detected.

TECHNOZYM® u-PA Combi Actibind® ELISA Kit

An ELISA for the combined quantitative determination of concentration and activity of u-PA in human plasma. TECHNOZYM® u-PA Combi Actibind® ELISA Kit is based on a catching antibody which does not interfere with the functional activity of u-PA. Following the binding of u-PA in the sample by the antibody, functional activity of bound u-PA is determined using chromogenic plasmin substrate. After measuring the functional activity, this determination system is washed away and bound u-PA antigen is detected using a peroxidase-labeled monoclonal anti u-PA antibody which recognizes both free u-PA and u-PA inhibitor complexes.

| Product | Description | REF | Package |
|---|-------------------------------------|---------|----------|
| TECHNOZYM® u-PA ELISA Kit RUO | 12 x 8 anti u-PA strips | TC12010 | 96 tests |
| | 1 x 0.3 ml anti u-PA Conjugate | | |
| | 1 x 100 ml Wash Buffer Concentrate | | |
| | 1 x 100 ml Incubation Buffer | | |
| | 1 x 12 ml TMB Substrate | | |
| | 1 x 12 ml Stop Solution | | |
| | 1 x 0.5 ml Standard u-PA | | |
| TECHNOZYM® u-PA Combi Actibind® ELISA RUO | 12 x 8 anti u-PA strips | TC16010 | 96 tests |
| | 1 x 0.3 ml anti u-PA Conjugate | | |
| | 1 x 20 ml Wash Buffer | | |
| | 1 x 20 ml Dilution Buffer | | |
| | 1 x 12 ml Conjugate Dilution Buffer | | |
| | 1 x 12 ml TMB Substrate | | |
| | 1 x 12 ml Stop Solution | | |
| | 1 x 0.5 ml Standard u-PA | | |
| | 1 x 20 ml Detection Buffer | | |
| 1 x 20 ml Detection Mixture | | | |

Plasminogen Activator Inhibitor-Type-1 (PAI-1)

Plasminogen Activator Inhibitor-Type-1 (PAI-1) also known as endothelial plasminogen activator inhibitor or serpin E1 is a protein that in humans is encoded by the *SERPINE1* gene. PAI-1 is a serine protease inhibitor (serpin) that functions as the principal inhibitor of tissue plasminogen activator (tPA) and urokinase (uPA), the activators of plasminogen and hence fibrinolysis. PAI-1, is the main inhibitor of the plasminogen activators. PAI-1 inhibits the serine proteases tPA and uPA/urokinase, and hence is an inhibitor of fibrinolysis, the physiological process that degrades blood clots.

TECHNOZYM® PAI-1 Antigen ELISA Kit

The assay is a double sandwich ELISA employing two monoclonal antibodies. The system detects active PAI-1, latent and t-PA - PAI-1 complexes. The detection limit is 0.5 ng/mL. Assay time is 2.5 hours.

TECHNOZYM® PAI-1 Actibind® ELISA Kit

A highly sensitive ELISA System for the quantitative determination of active PAI-1 antigen in human plasma. The kit allows determination of active PAI-1 antigen in plasma of patients also with disseminated intravascular coagulation and in atherosclerotic disease. The Kit is based on the immobilization of functionally active t-PA to plates by means of a monoclonal antibody. PAI-1 contained in the test samples binds to t-PA and is then quantified using a peroxidase-labeled monoclonal anti-PAI-1 antibody. The assay recognizes PAI-1 active form with no interference of PAI-2 (5 U/mL) and PAI-3 (5.5 µg/mL). Assay time is only 60 minutes.

| Product | Description | REF | Package |
|--|--|---------|------------|
| TECHNOZYM® PAI-1 Antigen ELISA Kit | 12 x 8 anti PAI-1 strips 1 x 0.3 ml anti PAI-1 Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | TC12075 | 96 tests |
| TECHNOZYM® PAI-1 Actibind® ELISA Kit | 12 x 8 Antigen t-PA strips 1 x 0.3 ml anti PAI-1 Conjugate 1 x 80 ml Wash Buffer Concentrate 1 x 90 ml Incubation Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | TC16075 | 96 tests |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® PAI-1 Antigen Calibrator Set | Additional 5 calibrators for TECHNOZYM® PAI-1 ELISA | TC12077 | 5 x 0.5 ml |
| TECHNOZYM® PAI-1 Antigen Control Set | Additional high and low control for TECHNOZYM® PAI-1 ELISA | TC12079 | 2 x 0.5 ml |
| TECHNOZYM® PAI-1 Actibind® Calibrator Set | Additional 5 calibrators for TECHNOZYM® PAI-1 Actibind® ELISA | TC16077 | 5 x 0.5 ml |
| TECHNOZYM® PAI-1 Actibind® Control Set | Additional high and low control for TECHNOZYM® PAI-1 Actibind® ELISA | TC16079 | 2 x 0.5 ml |

FIBRINOLYSIS

t-PA-PAI-1 Complex

To understand how fibrinolysis is regulated, in general and in individual patients, we need to know the circulating in vivo concentration of active t-PA, active PAI-1, and **t-PA-PAI-1 complex**. Knowing the concentrations of both t-PA-PAI-1 complex and active PAI-1 is crucial to understanding how the level of active t-PA is being controlled.

TECHNOZYM® t-PA - PAI-1 Complex ELISA Kit

For determination of t-PA-PAI-1 complexes in plasma. The kit is based on a monoclonal antibody directed against t-PA as a catching antibody for t-PA - PAI-1 complexes and a peroxidase-labeled monoclonal anti-PAI-1 antibody used for the detection of bound t-PA - PAI-1 complexes.

| Product | Description | REF | Package |
|--|-------------------------------------|---------|----------|
| TECHNOZYM® t-PA - PAI-1 Complex ELISA Kit RUO | 12 x 8 anti t-PA strips | | |
| | 1 x 0.3 ml anti PAI-1 Conjugate | | |
| | 1 x 20 ml Wash Buffer Concentrate | | |
| | 1 x 20 ml Incubation Buffer | | |
| | 1 x 12 ml TMB Substrate | TC12080 | 96 tests |
| | 1 x 12 ml Stop Solution | | |
| | 1 x 0.5 ml Standard | | |
| | 1 x 12 ml Conjugate Dilution Buffer | | |

Glu-Plasminogen

Plasminogen (Plg) is synthesized in the liver and circulates in two forms: **Glu-Plasminogen** and Lys-Plasminogen. In its native form Plasminogen contains a glutamic acid residue at the N-terminus and this molecule is termed Glu-Plasminogen.

TECHNOZYM® Glu-Plasminogen ELISA Kit

A highly sensitive complete sandwich ELISA for the selective determination of Glu-Plasminogen in human plasma. The Kit is based on two monoclonal antibodies; a catching antibody and a detecting antibody specific for the Glu-form of Plasminogen.

| Product | Description | REF | Package |
|---|---------------------------------------|---------|----------|
| TECHNOZYM® Glu-Plasminogen ELISA Kit RUO | 12 x 8 anti Plasminogen strips | | |
| | 1 x 0.3 ml anti Plasminogen Conjugate | | |
| | 1 x 80 ml Wash Buffer Concentrate | | |
| | 1 x 90 ml Dilution Buffer | TC12040 | 96 tests |
| | 1 x 12 ml TMB Substrate | | |
| | 1 x 12 ml Stop Solution | | |
| | 1 x 0.5 ml Standard | | |

Plasmin-Alpha-2-Antiplasmin (PAP) Complex

Plasmin-Alpha-2-Antiplasmin complex (PAP) is an index of recent fibrinolytic activity.

Alpha-2-antiplasmin (α_2 -antiplasmin) is a single chain 70 kD plasmin inhibitor which rapidly reacts with plasmin to form the inactive Plasmin-Alpha-2-Antiplasmin complex (PAP). Synthesized by the liver, α_2 -antiplasmin circulates in plasma at a concentration of approximately 1 μM (70 $\mu\text{g/mL}$), with 20% being cross-linked when blood clots. The formation of the PAP complex is a two step process. First, the lysine binding sites of plasmin and the carboxylterminal region of α_2 -antiplasmin form a reversible complex. In the second step, cleavage of the peptide bond of the inhibitor forms the irreversible complex. α_2 -antiplasmin is consumed during thrombolytic therapy. Increased PAP complex formation is accompanied by increased fibrin formation and an increased reactive plasminemia. Accordingly, a correlation between the level of fibrin split products and the level of PAP complexes exists.

TECHNOZYM® PAP Complex ELISA Kit

For the determination of the concentration of Plasmin- α_2 -Antiplasmin complexes in plasma. The Plasmin- α_2 -Antiplasmin Complex ELISA Kit is based on a monoclonal capture antibody which is directed against the neoantigenic site on the complex, an epitope only expressed in the complexes themselves. Therefore, this antibody is specific for complexes only and does not recognize free α_2 -antiplasmin or plasminogen. Detection of bound complexes is performed with a second monoclonal peroxidase-labeled antibody recognizing a different epitope on the complex.

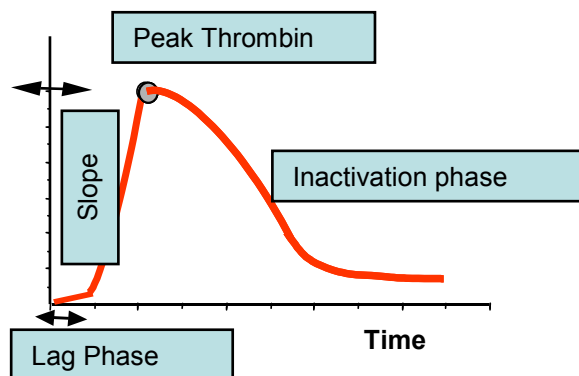
| Product | Description | REF | Package |
|--|--|---------|------------|
| TECHNOZYM® PAP Complex ELISA Kit RUO | 12 x 8 anti PAP strips 1 x 0.3 ml anti PAP Conjugate 2 x 20 ml Wash Buffer Concentrate 1 x 20 ml Dilution Buffer 1 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 7 x 0.5 ml Calibrators and Controls | TC12060 | 96 tests |
| Additional Calibrators & Controls | | | |
| TECHNOZYM® PAP Calibrator Set RUO | Additional 5 calibrators for TECHNOZYM® PAP Complex ELISA | TC12062 | 5 x 0.5 ml |
| TECHNOZYM® PAP Control Set RUO | Additional high and low control for TECHNOZYM® PAP Complex ELISA | TC12064 | 2 x 0.5 ml |

Thrombin Generation

TECHNOTROMBIN® TGA for Fluorescence Microplate Readers

TECHNOTROMBIN® TGA is a **Thrombin Generation Assay (TGA)** based on monitoring the formation of thrombin by means of a fluorogenic substrate upon activation of the coagulation cascade by tissue factor. This assay can be used to monitor hemophiliacs during inhibitor bypassing therapy, to monitor anticoagulation therapy and to determine states of thrombophilia.

The use of **TECHNOTROMBIN® TGA** for such diverse applications is made possible because **TECHNOTROMBIN® TGA** measures the whole kinetics of thrombin generation not only during the initiation phase of thrombin formation with the end point fibrin formation, but also during the phase of down regulation of thrombin formation and inactivation of the formed thrombin. **TECHNOTROMBIN® TGA** is therefore an universal tool for the analysis and monitoring of the haemostatic system on an individual basis.



Applications and an evaluation software can be downloaded from the website www.technoclone.com.

| Product | Description | REF | Package |
|-------------------------------|--|---------|--------------|
| TECHNOTROMBIN® TGA Kit | 3 x 1.5 ml TGA Substrate 1 x 3 ml TGA Buffer 1 x 0.5 ml TGA thrombin calibrator 1 x 0.5 ml TGA reagent C low (RCL) 1 x 0.5 ml TGA reagent C high (RCH) 1 x 1.5 ml TGA reagent D (RD) 1 x 1 ml TGA Control Low 1 x 1 ml TGA Control High | 5006010 | 3 x 16 tests |

Modular Reagents

| | | | |
|-----------------------------------|--|--------------------|---------------------------|
| TECHNOTROMBIN® TGA RA | Reagent A (RA); Low concentration of phospholipid micelles without tissue factor. | 5006205 5006206 | 5 x 0.5 ml 50 x 0.5 ml |
| TECHNOTROMBIN® TGA RB | Reagent B (RB); Low concentration of phospholipid micelles containing pM rhTF. | 5006209 5006210 | 5 x 0.5 ml 50 x 0.5 ml |
| TECHNOTROMBIN® TGA RC Low | Reagent C Low (RCL); Low concentration of phospholipid micelles and pM rhTF. | 5006212 5006213 | 5 x 0.5 ml 50 x 0.5 ml |
| TECHNOTROMBIN® TGA RC High | Reagent C High (RCH); High conc. of phospholipid micelles and pM rhTF. | 5006214 5006216 | 5 x 0.5 ml 50 x 0.5 ml |
| TECHNOTROMBIN® TGA RD | Reagent D (RD); RD conc. of phospholipid micelles. | 5006220 5006222 | 5 x 1.5 ml 50 x 1.5 ml |
| TECHNOTROMBIN® TGA SUB | Fluorogenic Substrate; 1 mM Z-G-G-R-AMC, 15 mM CaCl ₂ for plasma samples. | 5006235 5006230 | 5 x 1.5 ml 50 x 1.5 ml |

Calibrator Set & Controls

| | | | |
|--|---|---------|----------|
| TECHNOTROMBIN® TGA CAL Set | 1 x 3 ml TGA Buffer 1 x 0.5 ml TGA Thrombin Calibrator | 5006345 | 1 Set |
| TECHNOTROMBIN® TGA Control High | TGA High Control. Human plasma with increased thrombin generation | 5006320 | 5 x 1 ml |
| TECHNOTROMBIN® TGA Control Low | TGA Low Control. Human plasma with decreased thrombin generation | 5006330 | 5 x 1 ml |

Thrombin Generation

Thrombin Generation for Ceveron® alpha TGA

Ceveron® alpha TGA reagents are optimized Thrombin Generation Reagents for the automated analyzer Ceveron® alpha TGA who is equipped with a fluorescence measurement module (TGA Module). Thrombin Generation on Ceveron® alpha TGA is measured with a special adapted TGA fluorimetric module.

Thrombin Generation on Ceveron® alpha TGA can be measured from the same sample as routine parameters, with easy identification of patient samples, „traceability“ of the reagent used, minimal handling errors and an inbuilt quality control. Thrombin Generation can be measured reproducibly under routine laboratory conditions.

With the new optimized measurement: - an intra/inter-assay **CVs < 5%** can be reached and
- a short assay time of **~20 min for Peak Thrombin** determination can be achieved.

| Product | Description | REF | Package |
|---|--|---------|-----------|
| Ceveron® TGA RB | Reagent B (RB); Low concentration of phospholipid micelles containing pM rhTF. | 5006202 | 5 x 1 ml |
| | | 5006204 | 50 x 1 ml |
| Ceveron® TGA RC Low | Reagent C Low (RCL); Low concentration of phospholipid micelles and pM rhTF. | 5006224 | 5 x 1 ml |
| | | 5006225 | 50 x 1 ml |
| Ceveron® TGA RC High | Reagent C High (RCH); High conc. of phospholipid micelles and pM rhTF. | 5006227 | 5 x 1 ml |
| | | 5006228 | 50 x 1 ml |
| Ceveron® TGA SUB | Fluorogenic Substrate; 1 mM Z-G-G-R-AMC for plasma samples. | 5006237 | 5 x 3 ml |
| | | 5006239 | 50 x 3 ml |
| Calibrator Set & Controls | | | |
| Ceveron® TGA CAL SET | 1 x 3 ml Ceveron® TGA Buffer [1] | 5006347 | 1 Set |
| | 1 x 1 ml Ceveron® TGA Reaction Buffer [2] | | |
| | 1 x 0.5 mL TGA Thrombin Calibrator | | |
| Ceveron® TGA Control High | TGA High Control. Human plasma with increased thrombin generation | 5006322 | 5 x 1 ml |
| Ceveron® TGA Control Low | TGA Low Control. Human plasma with decreased thrombin generation | 5006332 | 5 x 1 ml |
| Buffer & Solution | | | |
| Ceveron® TGA Reaction buffer [2] | Reaction buffer [2] for the use with Ceveron® alpha. | 5006370 | 5 x 1 ml |
| | | 5006372 | 50 x 1 ml |
| CaCl₂ 25 mM | | 5277017 | 20 ml |

Thrombin Generation

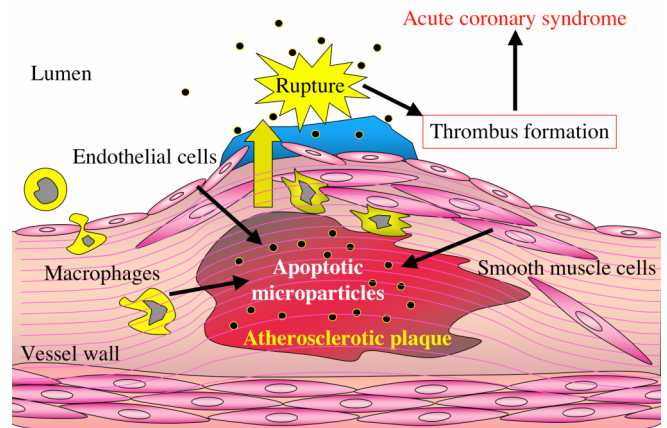
Microparticles

Measurement of **microparticles** was hampered by laborious methods to isolate and characterize microparticles or assays which determine only a fraction of thrombogenic microparticles.

Circulating microparticles, between 1.0 and 0.1 μm in size are derived from apoptotic or activated cells, contain phospholipids, proteins and other constituents from their parent cells and are thrombogenic. In fact, microparticles are thought to be a pivotal risk factor for thrombosis in thrombophilic patients.

The **TECHNOTHROMBIN[®] MP** kit allows direct determination of the levels of circulating thrombogenic microparticles with a Fluorescence Microplate Reader. It includes a microparticle standard as well as a microparticle high and low control plasma and all reagents for measurement of thrombin generation.

The filtration of the samples is done with the **Ceveron[®] MFU** (see page 36),



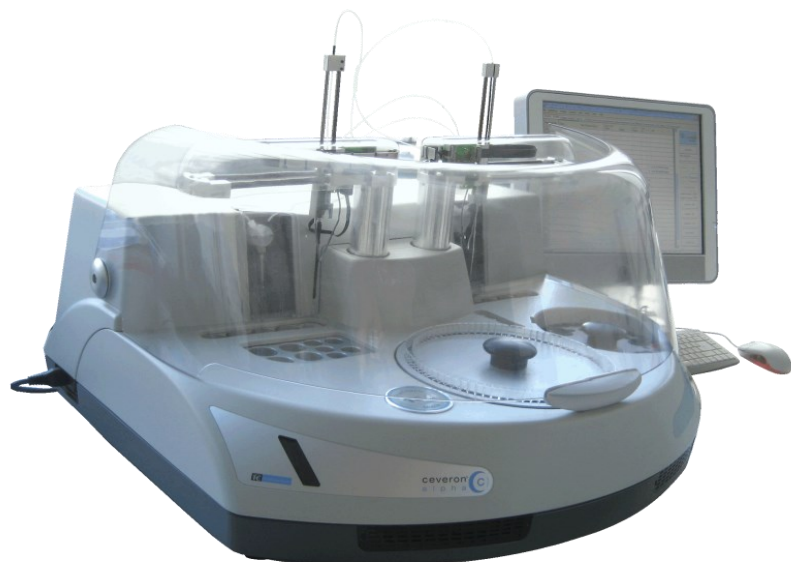
* P144 ASH 2005 H. Isobe

Applications and an evaluation software can be downloaded from the website www.technoclone.com.

| Product | Description | REF | Package |
|---|---|---------|------------|
| TECHNOTHROMBIN[®] MP | 4 x 1.5 ml TGA Substrate 1 x 3 ml TGA Buffer 1 x 0.5 ml TGA Thrombin Calibrator 3 x 0.5 ml TGA reagent C low (RCL) 1 x 1 ml TGA Microparticle Low Control 1 x 1 ml TGA Microparticle High Control 1 x Nunc Plate black fluorescence 1 x Filter Plate 0,2 μm 1 x Receiver Plate | 5006400 | 2x12 tests |
| Calibrator Set & Controls | | | |
| TECHNOTHROMBIN[®] TGA MLC | TECHNOTHROMBIN [®] TGA MLC is a microparticle low control suitable for determining thrombin generation by microparticles. | 5006351 | 5 x 1 ml |
| TECHNOTHROMBIN[®] TGA MHC | TECHNOTHROMBIN [®] TGA MHC is a microparticle high control suitable for determining thrombin generation by microparticles. | 5006352 | 5 x 1 ml |

Ceveron® alpha

Ceveron® alpha is a compact and fully automated coagulation analyzer for routine, research and new generation diagnostics.



Clotting



Turbidimetric



Chromogenic



Fluorometric
(Thrombin Generation*)

*optional

| Product | Description | REF | Package |
|------------------------------------|--|-------------------------------|-------------------------------------|
| Ceveron® alpha | Fully automated coagulation analyzer for clotting, chromogenic and turbidimetric assays. | 9820000 | 1 pc. |
| Ceveron® alpha TGA | Fully automated coagulation analyzer for clotting, chromogenic, turbidimetric and fluorimetric assays. TGA fluorimetric module for measurement of TECHNOTHROMBIN® TGA is included. | 9820010 | 1 pc. |
| Ceveron® alpha All In One | Touch Screen for the use with Ceveron® alpha. | 9820100 | 1 pc. |
| Solutions | | | |
| System Solution | System Solution for the use with Ceveron® alpha. | 9820200 | 750 ml |
| System Solution Concentrate | System Solution Concentrate for the use with Ceveron® alpha. | 9820202 | for 9 x 750 ml |
| Cleaning Solution | Cleaning Solution for the use with Ceveron® alpha. | 9820300 9820302 | 20 ml 9 x 20 ml |
| Wash Solution | Wash Solution for the use with Ceveron® alpha | 9820320 9820326 9820328 | 20 ml 750 ml 9 x 20 ml |
| Cuvettes & Stirrers | | | |
| Magnetic Stirrer Bars | Magnetic Stirrer Bars for Ceveron® alpha. | 9820340 | 5 pc. |
| Cuvette segments | Cuvette segments for Ceveron® alpha. | 9820500 9820510 | 50 x 12 racks 10 x 50 x 12 racks |
| Sample Cups | Sample cups for Ceveron® alpha. | 9820515 9820520 | 100 pc. 1000 pc. |

For a complete list of spare parts please contact sales@technoclone.com

Ceveron® MFU 500

Ceveron® Microparticle Filtration Unit (MFU) 500 enables easy, quick and standardised removal of microparticles from platelet poor plasma. Filtration is as effective as ultra-centrifugation to remove thrombogenic MP's from PPP.

EASY & QUICK



Pipette sample into the filter plate



Push the "START" button and filtration starts automatically



After filtration is terminated push the "VENTILATION" button



Filtered sample from the receiver plate

| Product | Description | REF | Package |
|-------------------------|---|---------|---------|
| Ceveron® MFU 500 | 1 x Ceveron MFU 500 instrument 1 x Adapter 1 x Replacement Kit (gaskets) 1 x Filter plate 0.2 µm 1 x Receiver plate 2 x Plate Sealer Cover 1 x Warranty 1 x Manual | 9821010 | 1 pc. |

Accessories

| | | | |
|---------------------------------------|--|--------------------|-------------------|
| Replacement Accessory Kit | Replacement Accessory Kit for Ceveron® MFU 500. | 9821013 | 1 pc. |
| Filter plate 0.2 µm (96 wells) | Filter plate for Ceveron® MFU 500. | 9821035 9821040 | 1 pc. 10 pc. |
| Receiver plate (96 wells) | Receiver plate for Ceveron® MFU 500. | 9821055 9821060 | 1 pc. 10 pc. |
| Plate sealer for Filter plates | Plate sealer for Filter plates for Ceveron® MFU 500. | 9821033 9821034 | 10 pc. 100 pc. |

Auxiliary Reagents

| Product | Description | REF | Package |
|---------------------------------------|---|---------|-------------------|
| CaCl₂ 25 mM | Calcium Chloride solution for determination of aPTT with DAPTTIN [®] TC, SIRON LS, SIRON LIS and TECHNOCLOT [®] PT Owren | 5277015 | 100 ml |
| | | 5277020 | 9 x 20 ml |
| CaCl₂ 50 mM | Calcium Chloride solution for determination of intrinsic coagulation factors with deficient methods | 5279025 | 100 ml |
| | | 5279027 | 20 ml |
| Citrate Sodium Chloride Buffer | Dilution buffer for determination of coagulation factors II, V, VII and X with Thromboplastin reagent | 5400045 | 60 ml |
| | | 5400047 | 20 ml |
| Imidazole Buffer | Dilution buffer for use in factor VIII, IX, XI, XII and factor VIII inhibitor tests, Protein C, Fibrinogen and TECHNOCLOT [®] PT Owren | 5410010 | 50 ml |
| | | 5410012 | 90 ml |
| | | 5410014 | 500 ml |
| Sodium-Chloride solution 0.9% | For the use with ATIII and PC | 4847127 | 25 ml |
| for Ceveron[®] alpha | | | |
| CaCl₂ 25 mM | Calcium Chloride solution for determination of aPTT with DAPTTIN [®] TC, SIRON LS, SIRON LIS and TECHNOCLOT [®] PT Owren | 5277017 | 20 ml |
| | | 5277020 | 9 x 20 ml |
| CaCl₂ 50 mM | Calcium Chloride solution for determination of intrinsic coagulation factors with deficient methods | 5279027 | 20 ml |
| | | | |
| Citrate Sodium Chloride Buffer | Dilution buffer for determination of coagulation factors II, V, VII and X with Thromboplastin reagent | 5400047 | 20 ml |
| | | | |
| Imidazole Buffer | Dilution buffer for use in factor VIII, IX, XI, XII and factor VIII inhibitor tests, Protein C, Fibrinogen and TECHNOCLOT [®] PT Owren | 5410008 | 20 ml |
| | | 5410007 | 9 x 20 ml |
| Sodium-Chloride solution 0.9% | For the use with ATIII and PC | 4847127 | 25 ml |
| System Solution | System Solution for the use with Ceveron [®] alpha. | 9820200 | 750 ml |
| System Solution Concentrate | System Solution Concentrate for the use with Ceveron [®] alpha. | 9820202 | for 9 x 750 ml |
| Cleaning Solution | Cleaning Solution for the use with Ceveron [®] alpha. | 9820300 | 20 ml |
| | | 9820302 | 9 x 20 ml |
| Wash Solution | Wash Solution for the use with Ceveron [®] alpha | 9820320 | 20 ml |
| | | 9820326 | 750 ml |
| | | 9820328 | 9 x 20 ml |

RESEARCH PRODUCTS

Fibronectin

Fibronectin is a high-molecular weight (~440kDa) glycoprotein of the extracellular matrix that binds to membrane-spanning receptor proteins called integrins. Similar to integrins, fibronectin binds extracellular matrix components such as collagen, fibrin, and heparan sulfate proteoglycans (e.g. syndecans).

Fibronectin ELISA Kit

A high sensitive complete sandwich ELISA for the selective determination of intact uncleaved fibronectin in human plasma. The Fibronectin ELISA Kit is based on two monoclonal antibodies. One monoclonal antibody is immobilized to microtitre plates for use as a catching antibody; the second peroxidase-labeled monoclonal antibody recognizes exclusively uncleaved fibronectin.

| Product | Description | REF | Package |
|---|--|---------|----------|
| TECHNOZYM® Fibronectin ELISA Kit RUO | 12 x 8 anti Fibronectin strips 1 x 0.3 ml anti Fibronectin Conjugate 1 x 20 ml Wash Buffer Concentrate 3 x 20 ml Dilution Buffer 2 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 1 x 0.5 ml Fibronectin Standard | TC12030 | 96 tests |
| Fibronectin protein | Purified from human plasma, lyophilized | TC41150 | 1 mg |
| Monoclonal anti Fibronectin antibody 2FN | Lyophilized; IgG | TC21223 | 500 µg |
| Monoclonal anti Fibronectin antibody 6FN | Lyophilized; IgG | TC21243 | 500 µg |

Vitronectin

Vitronectin is a 75 kDa glycoprotein.

Vitronectin ELISA Kit

The Vitronectin Antigen ELISA Kit is an antibody “sandwich” system in which one monoclonal antibody functions as the catching antibody and a peroxidase-labeled polyclonal is the detecting antibody.

| Product | Description | REF | Package |
|---|--|---------|----------|
| TECHNOZYM® Vitronectin ELISA Kit RUO | 12 x 8 anti Vitronectin strips 1 x 0.3 ml anti Vitronectin Conjugate 1 x 20 ml Wash Buffer Concentrate 1 x 20 ml Dilution Buffer 2 x 12 ml TMB Substrate 1 x 12 ml Stop Solution 1 x 1 ml Vitronectin Standard | TC12120 | 96 tests |
| Vitronectin protein | Purified from human plasma, lyophilized | TC41140 | 50 µg |
| Monoclonal anti Vitronectin antibody 2VN | Lyophilized; IgG | TC21511 | 500 µg |
| Polyclonal anti Vitronectin antibody Rabbit | Lyophilized | TC31054 | 1 mg |

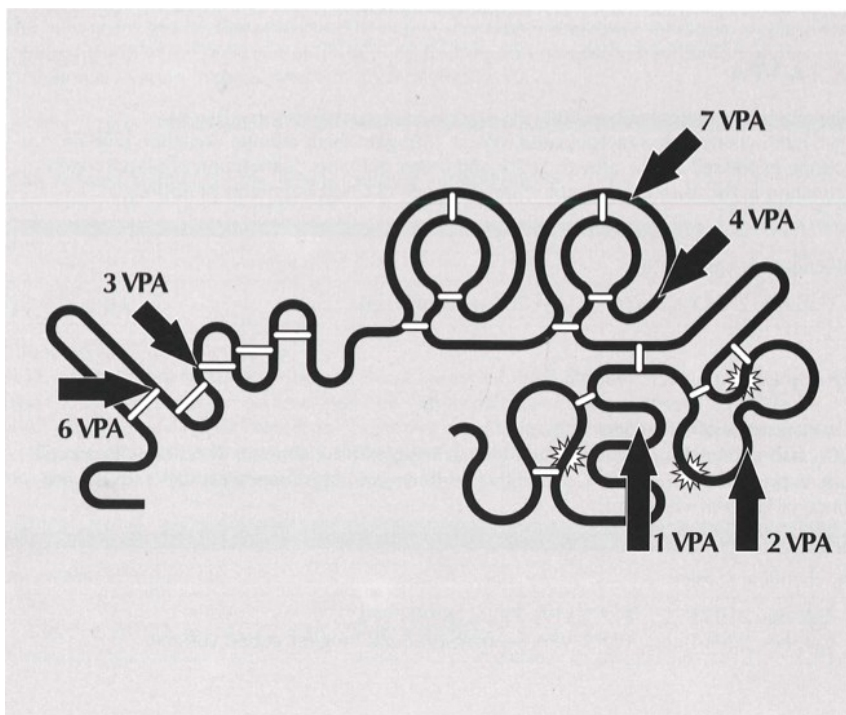
Tissue-type Plasminogen Activator (t-PA)

t-PA is a plasminogen activator produced and released in its single chain form with an apparent molecular weight of 70kD. Single chain t-PA is converted to double chain t-PA by plasmin mediated cleavage of the Arg-278-Ile-279 peptide bond. The resulting 2-chain molecule consist of a light chain (B-chain) containing the catalytic site Ser, His, Arg and a heavy chain (A-chain) containing two kringle-structure, an EGF-domain, and a fibronectin finger domain.

The fibrin specificity of t-PA is mediated by fibrin binding via finger and/or kringle-2-domain, wherby, in latter case, lysine binding sites are involved.

t-PA displays a unique fibrin-specific plasminogen activating function. In the absence of fibrin both single-chain and double-chain t-PA are poor activators of Glu-plasminogen due to a relatively high K_M value and a low K_{cat} value. However, in the presence of physiological concentrations of fibrin the plasminogen activating activity of t-PA is increased 200-400 fold resulting from a decrease in K_M and an increase in K_{cat} values. While both single and double-chain t-PA share similar plasminogen activating properties in physiological systems, double chain t-PA is more active than single-chain t-PA in an amidolytic assay with low molecular weight paranitroanilide substrates as well as in Glu-plasminogen activating assay systems. The two forms also differ in their rates of inactivation by physiological inhibitors: Double-chain t-PA is more easily inactivated by PAI-2 than single-chain t-PA.

t-PA circulates in plasma at a concentration of approximately 5ng/ml. However, 95% of circulating t-PA is complexed with plasminogen activator inhibitor (PAI-I) and less than 5% circulates in its free form. Upon venous occlusion the concentration of t-PA antigen increases to 10 ng/ml or higher leading to measurable fibrinolytic activity. This is probably due to a combination of increased t-PA release by endothelial cells and a reduction in the t-PA clearance from the occlusion site.



RESEARCH PRODUCTS

Tissue-type Plasminogen Activator (t-PA)

| Monoclonal Antibody | TC 2VPA | TC 3VPA | TC 7VPA |
|---|-------------|------------------|------------------|
| Class | IgM | IgG ₁ | IgG ₁ |
| Epitope | Light-chain | Finger/EGF | K ₂ |
| Half-max. binding (µg/ml) | 0.65 | 8.5 | 19.0 |
| Influence on cleavage of S-2288 | - | - | - |
| Influence on plasminogen activation in the presence of CNBr fragments of fibrinogen | + | - | - |
| Inhibition | Non | Competitive | Competitive |
| K _i (nM) | | 0.68 | 0.57 |

Cadaver vessel perfusate plasminogen activator purified according to the method of Binder et al. (B.R. Binder, J.Spragg, K.F. Austen: *Purification and characterization of human vascular plasminogen activator derived from blood vessel perfusates*. J. Biol. Chem. 1998-2003, 1979).

| Product | Description | REF | Package |
|---|-------------------------------|--------------------|--------------|
| t-PA purified protein | Recombinant t-PA, lyophilized | TC41072 | 100 µg |
| Monoclonal anti t-PA antibody 2VPA | Lyophilized, IgM | TC21013 | 500 µg |
| Monoclonal anti t-PA antibody 3VPA | Lyophilized, IgG ₁ | TC21023 | 500 µg |
| Monoclonal anti t-PA antibody 7VPA | Lyophilized, IgG ₁ | TC21053 | 500 µg |
| Polyclonal anti t-PA antibody Rabbit | Lyophilized | TC31014 TC31005 | 1 mg 5 mg |

Plasminogen Activator Inhibitor-Type1 (PAI-1)

PAI-1 is a glycoprotein with an approximate Mr of 50,000, consisting of 379 amino acids, lacking cysteine residues. It is a member of the serine protease inhibitor (Serpin) superfamily with homology with antithrombin III, PAI-2, alpha-2-antiplasmin, C1-inhibitor, and alpha-1-protease inhibitor.

PAI-1 reacts about equally well with single and double chain t-PA, with second order rate constants in the range of 10^7 to 10^8 $M^{-1}s^{-1}$, but not with single chain u-PA. The interaction of PAI-1 and t-PA is reported to be about 5-10-fold slower in the presence of fibrin. The interaction of plasminogen activator with PAI-1 probably results first in the formation of a reversible complex which, in a second step, becomes covalent after the cleavage of the peptide bond Arg 346 - Met 347 has taken place. Finally, a 33 amino acid stretch (Met 347 - Pro 379) is released from the complex reducing the Mr of activator-inhibitor complex by approximately 4.2kD. The plasma concentration of PAI-1 is in the range of 1nM, but the plasma compartment accounts only for three quarters of the total PAI-1 content in blood. A large amount of PAI-1 is contained in platelets, which upon physiological stimuli, e.g. thrombin, releases PAI-1.

| Monoclonal Antibody | TC 1PAI | TC 3PAI | TC 5PAI |
|------------------------------|------------------|-------------------|------------------|
| Class | IgG ₂ | IgG _{2b} | IgG ₁ |
| Half-max. binding (µg/ml) | 1.0 | 10.0 | n.d. |
| Active PAI-1 | + | + | + |
| Latent PAI-1 | + | + | + |
| t-PA - PAI-1 complexes | + | + | + |
| PAI-2 and PAI-3 | - | - | - |
| Functional activity of PAI-1 | No effect | Interference | interference |

Purified plasminogen activator inhibitor 1 from the human melanoma cell line MJZJ according to the method of Wagner et al. (O.F.Wagner, B.R. Binder: *Purification of an active plasminogen activator inhibitor immunologically related to the endothelial type plasminogen inhibitor from conditioned media of a human melanoma cell line*. J. Biol. Chem. 261: 14474-14481, 1986).

| Product | Description | REF | Package |
|--|--------------------------------|---------|---------|
| PAI-1 purified protein | Recombinant PAI-1, lyophilized | TC41069 | 250 U |
| | | TC41067 | 500 U |
| Monoclonal anti PAI-1 antibody 1PAI | Lyophilized, IgG ₂ | TC21163 | 500 µg |
| Monoclonal anti PAI-1 antibody 3PAI | Lyophilized, IgG _{2b} | TC21173 | 500 µg |
| Monoclonal anti PAI-1 antibody 5PAI | Lyophilized, IgG ₁ | TC21193 | 500 µg |
| Polyclonal anti PAI-1 antibody Rabbit | Lyophilized | TC31024 | 1 mg |
| | | TC31025 | 5 mg |

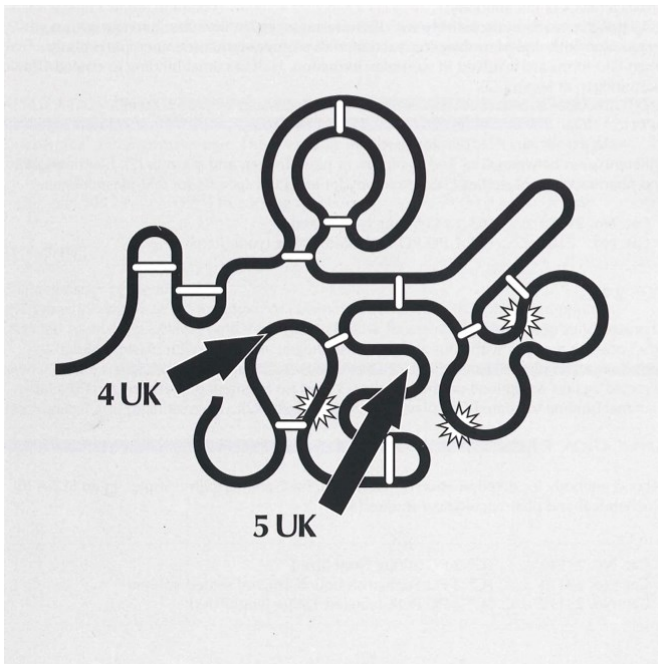
Urokinase-type Plasminogen Activator (u-PA)

u-PA is a 55kD two chain plasminogen activator produced by plasmin or kallikrein cleavage of single-chain precursor molecule scu-PA at the site of the Lys-158 - Ileu159 peptide bond. A single disulphide bond links the two chains of the u-PA molecule: the B-chain contains the catalytic site and the A-chain contains a kringle-domain and a growth factor domain. Thrombin is capable of cleaving scu-PA at position Arg-156 - Phe-157 resulting in an inactive 2-chain u-PA.

Single chain u-PA has some intrinsic activities which represents less than 5% of the activity of 2-chain u-PA. However, scu-PA is capable of activating plasminogen to plasmin, a process which is stimulated in the presence of fibrin and which, especially in vivo, mediates fibrin specific thrombolytic activity.

As compared to tissue-type plasminogen activator which binds to forming fibrin, u-PA binds to specific receptors on several cell types, thereby focusing its plasminogen activating and proteolytic activity on the cell surface.

u-PA circulates in its single chain form in plasma in an average concentration of 1 to 2 ng/ml. Its concentrations is increased in cases of some malignancies, especially those of the urogenital and gastrointestinal tracts.



| Monoclonal Antibody | TC 4UK | TC 5UK |
|--|------------------|------------------|
| Class | IgG ₁ | IgG ₁ |
| Half-max. binding (µg/ml) | 0.56 | 0.03 |
| Influence on cleavage of S-2444 | - | - |
| Influence on plasminogen activation inhibition | - | + |

Purified human urinary high molecular weight urokinase according to the method of Huber et al. (k. Huber, J. Kircheimer, B.R. Binder: *Characterization of specific anti-human urokinase antibody: development of a sensitive competitive radioummunoassay for urokinase antigen*. J. Lab. Clin. Med. 103: 684-694, 1984).

| Product | Description | REF | Package |
|---|-------------------------------|--------------------|--------------|
| u-PA purified protein | Purified human, lyophilized | TC42000 | 125 µg |
| Monoclonal anti u-PA antibody 4UK | Lyophilized, IgG ₁ | TC21063 | 500 µg |
| Monoclonal anti u-PA antibody 5UK | Lyophilized, IgG ₁ | TC21073 | 500 µg |
| Polyclonal anti u-PA antibody Rabbit | Lyophilized | TC31014 TC31015 | 1 mg 5 mg |

RESEARCH PRODUCTS

Single Chain Urokinase Plasminogen Activator (scu-PA)

Urokinase-type plasminogen activator (uPA) is synthesized as single-chain protein (scuPA) with little intrinsic activity. scuPA is activated when it is converted to two-chain urokinase (tcuPA) by plasmin or when it binds as a single-chain molecule to its cellular receptor (uPAR).

| Monoclonal Antibody | TC 35 scuPA | TC 14 scu-PA | TC 1 scu-PA | TC PUK |
|--------------------------------|------------------|------------------|------------------|--------|
| Class | IgG ₁ | IgG ₁ | IgG ₁ | n.d. |
| Two-chain urokinase | + | + | + | - |
| Low molecular weight urokinase | + | + | n.d. | - |
| Functional activity inhibition | - | Partially | n.d. | - |

| Product | Description | REF | Package |
|--|-------------------------------|---------|---------|
| scu-PA purified protein | from cell culture, frozen | TC41052 | 100 µg |
| Monoclonal anti scu-PA antibody 35 scu-PA | Lyophilized, IgG ₁ | TC21283 | 500 µg |
| Monoclonal anti scu-PA antibody 14 scu-PA | Lyophilized, IgG ₁ | TC21293 | 500 µg |
| Monoclonal anti scu-PA antibody 1 scu-PA | Lyophilized, IgG ₁ | TC21393 | 500 µg |
| Monoclonal anti scu-PA antibody PUK | Lyophilized | TC21383 | 500 µg |

CNBr Fibrinogen fragments

Fibrinogen is the main plasma coagulation factor. It exhibits a molecular weight of 340KD and consist of a dimer of A-alpha-, B-beta- and gamma-chains, held together by disulfide bridges. Upon thrombin cleavage of the A-alpha- and B-beta-chain, fibrinopeptide A and thereafter fibrinopeptide B moieties are released. Binding sites from C-terminal regions of other fibrinogen or fibrin molecules are generated in the new aminoterminal. This allows formation of fibrin polymers which can be crosslinked by fibrin stabilizing factor. Fibrin is highly susceptible to proteolysis by plasmin which initially leaves the C-terminal part of the alpha-chain generating lysine residues which, in turn, are involved in the binding of kringle structures leading to maximal stimulation of plasminogen activation by tissue plasminogen activator.

The stimulating effect of fibrin on plasminogen activation by t-PA is also mimicked by cyanogen bromide (CNBr) fragments of fibrinogen. Technoclone CNBr-fragments of fibrinogen are obtained by cyanogen bromide digestion of purified human fibrinogen according to the method of Blombäck et al. *N-terminal disulphide knot of human fibrinogen*. Nature 218: 130-134, 1968

| Product | Description | REF | Package |
|----------------------------------|-------------|---------|---------|
| CNBr Fibrinogen fragments | Lyophilized | TC41104 | 1 mg |
| | | TC41105 | 5 mg |

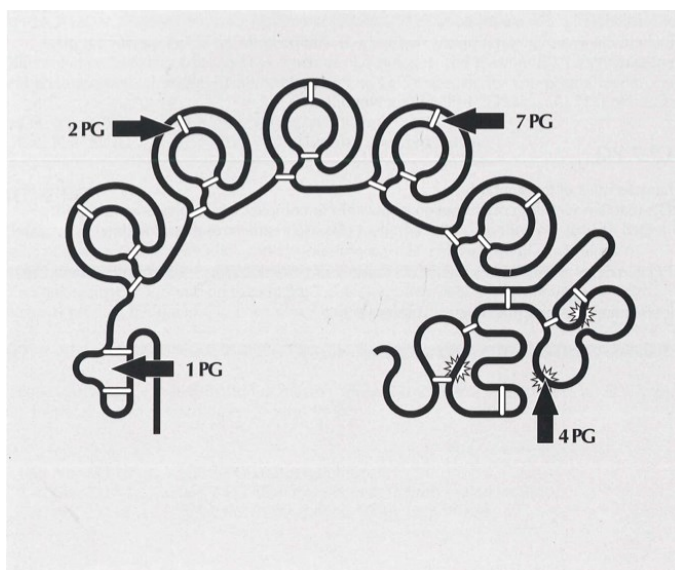
Plasminogen

Plasminogen, the precursor of the serine protease plasmin, is a single chain glycoprotein with a molecular weight of approximately 92kD. Plasminogen activators cleave a single peptide bond in plasminogen between Arg-560 - Val-561 to generate the two-chain molecule plasmin which is a potent proteolytic enzyme with trypsin-like specificity.

The fibrin specificity of the proteolytic action of the active site contained in the B-chain of plasmin is mediated by kringle structures in the A-chain which can bind to lysine residues as they are exposed during fibrin formation. These kringle structures are also responsible for the affinity of plasmin(ogen) to alpha-2-antiplasmin, histidin-rich-glycoprotein and thrombospondin.

Plasminogen circulates in plasma in its native form Glu-plasminogen. The limited proteolytic action of plasmin on Glu-plasminogen cleaves a 76 or 67 amino acid aminoterminal peptide generating Lys- or Arg-plasminogen, respectively. Lys-plasminogen has higher affinity for lysine residues and is more readily activated by plasminogen activator than Glu-plasminogen.

The functional domains of plasminogen are revealed by elastase cleavage of the molecule which result in 3 major fragments: kringle 1-3 fragment, kringle 4 fragment and kringle 5 containing mini-plasminogen.



| Monoclonal Antibody | TC 1PG | TC 2PG | TC 4PG | TC 7PG |
|--|------------------|------------------|------------------------------------|------------------|
| Class | IgG ₁ | IgG ₁ | IgG ₁ | IgG ₁ |
| Binding to plasminogen | Glu-Plg | K ₁₋₃ | Mini-Plg | K ₄ |
| Binding to plasmin-alpha-2-antiplasmin complex | + | + | - | + |
| Half-max. binding (ng/ml) | 0.006 | 0.010 | n.d. | n.d. |
| Inhibition of plasminogen activation | - | - | Competitive K _i =4nM | - |
| Stimulation of plasminogen activation | + | + | - | + |

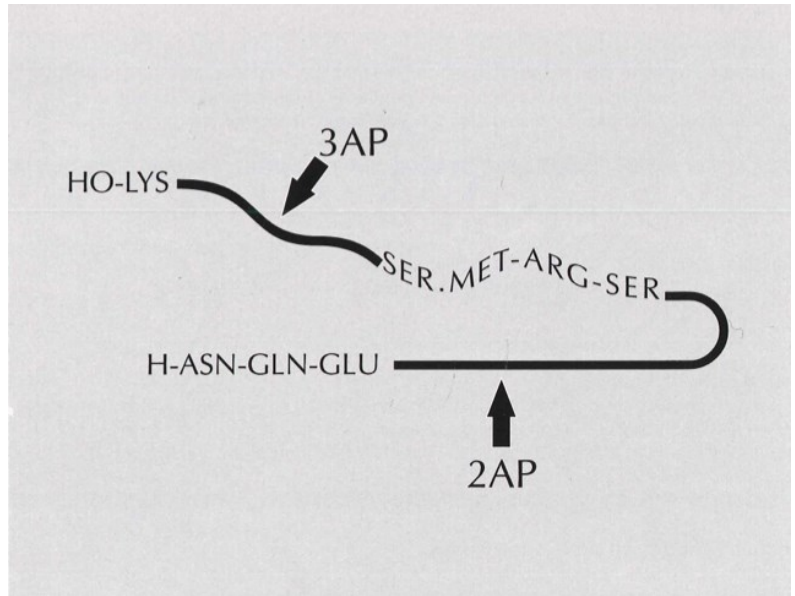
| Product | Description | REF | Package |
|---|---|---------|---------|
| Glu-Plasminogen protein | Purified from human plasma, lyophilized | TC41004 | 1 mg |
| | | TC41005 | 5 mg |
| Lys-Plasminogen protein | Purified from human plasma, lyophilized | TC41014 | 1 mg |
| | | TC41015 | 5 mg |
| Monoclonal anti plasminogen antibody 1PG | Lyophilized, IgG ₁ | TC21103 | 500 µg |
| Monoclonal anti plasminogen antibody 2PG | Lyophilized, IgG ₁ | TC21113 | 500 µg |
| Monoclonal anti plasminogen antibody 4PG | Lyophilized, IgG ₁ | TC21123 | 500 µg |
| Monoclonal anti plasminogen antibody 7PG | Lyophilized, IgG ₁ | TC21133 | 500 µg |

Alpha-2-Antiplasmin

Alpha-2-antiplasmin is a member of the serine protease inhibitor superfamily. It is a single chain glycoprotein with an apparent molecular weight of 70kD and acts as the primary inhibitor of plasmin in plasma. It inhibits, in a fast reaction, plasmin whereby in a fast phase the C-terminal region of alpha-2-antiplasmin binds reversibly to the lysine-binding site of plasmin and, in a second step, the serine residue of the active site of plasmin reacts with the reactive site Arg-354 - Met-355 of alpha-2-antiplasmin.

Subsequently, an 11kD C-terminal sequence is liberated but remains non-covalently bound to the lysine-binding site 1 of plasmin. Alpha-2-antiplasmin also crosslinks with the alpha-chain of fibrin through a site close to the N-terminal. Therefore, alpha-2-antiplasmin interferes with the fibrin-binding of plasminogen to fibrin but crosslinked alpha-2-antiplasmin enhances indirectly the binding of plasminogen to fibrin.

Alpha-2-antiplasmin circulates in plasma in a concentration of approximately 1 μM equivalent to 70 μg/ml. It is synthesized in the liver and has a biological half-life of 3.3 days. During coagulation approximately 20% of alpha-2-antiplasmin is crosslinked to fibrin.



| Monoclonal Antibody | TC 2AP | TC 3AP |
|---|------------------|------------------|
| Class | IgG ₁ | IgG ₁ |
| Half-max. binding (μg/ml) | 0.009 | 0.008 |
| Reaction with native alpha-2-antiplasmin | + | + |
| Reaction with plasmin-alpha-2-antiplasmin complex | + | - |

| Product | Description | REF | Package |
|---|--------------------------------|---------|---------|
| Monoclonal anti α-2-Antiplasmin antibody 2 AP | Lyophilized, IgG ₁ | TC21083 | 500 μg |
| Monoclonal anti α-2-Antiplasmin antibody 3 AP | Lyophilized, IgG ₁ | TC21093 | 500 μg |
| Monoclonal anti α-2-Antiplasmin antibody 7 AP | Lyophilized, IgG ₁ | TC21263 | 500 μg |
| Monoclonal anti α-2-Antiplasmin antibody 14 AP | Lyophilized, IgG _{2a} | TC21265 | 500 μg |

RESEARCH PRODUCTS

Protein C Inhibitor

Protein C Inhibitor (PCI, SERPINA5) is a serine protease inhibitor (serpin) which limits the expression of protein C (an anticoagulant). An N-terminal fragment of PCI is a possible serum biomarker for prostate cancer.

TECHNOZYM® Protein C Inhibitor Actibind ELISA Kit allows the determination of active Protein C Inhibitor antigen. The assay is based on the immobilization of functionally active urokinase to plates by means of a monoclonal antibody. Protein C Inhibitor contained in the test sample binds to u-PA and is then quantified using a peroxidase-labeled monoclonal anti-Protein C Inhibitor antibody.

| Product | Description | REF | Package |
|--|-----------------------------------|---------|----------|
| TECHNOZYM® Protein C Inhibitor Actibind ELISA RUO | 12 x 8 anti t-PA strips | TC12021 | 96 tests |
| | 1 x 0.3 ml anti PAI-1 Conjugate | | |
| | 1 x 20 ml Wash Buffer Concentrate | | |
| | 1 x 20 ml Incubation Buffer | | |
| | 1 x 12 ml TMB Substrate | | |
| | 1 x 12 ml Stop Solution | | |
| | 1 x 0.5 ml Standard | | |
| 1 x 12 ml Conjugate Dilution Buffer | | | |
| Monoclonal anti Protein C Inhibitor antibody 4PCI | Lyophilized, IgG ₁ | TC21353 | 500 µg |

Peroxidase labeled anti ADAMTS-13 antibody

Rabbit raised polyclonal antibodies against full length recombinant human ADAMTS-13, recognizing plasma derived human ADAMTS-13. Purification with affinity chromatography on Protein G and peroxidase conjugated.

| Product | Description | REF | Package |
|--|-------------------|---------|---------|
| Polyclonal ADAMTS-13 antibody Peroxidase conjugated | Rabbit anti human | 5450555 | 1 ml |

Factor V Leiden

The Genotyping Kit – Venous Thrombosis allows the determination of the R/Q 506 mutation in the factor V gene (Factor V Leiden), the 20210 G/A mutation in the prothrombin (Factor II) gene and A/V 223 (677 C/T) mutation in the 5,10-methylene-tetrahydrofolate reductase gene (MTHFR).

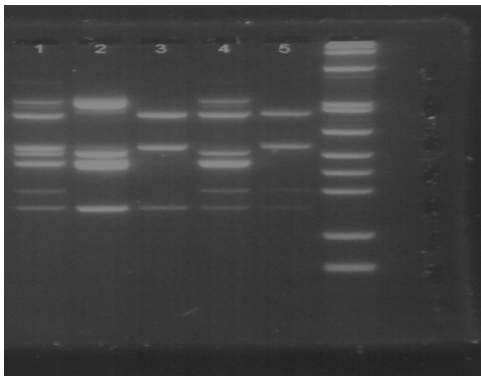
The assay consists of three steps

1. DNA extraction
2. DNA amplification by PCR
3. Analysis of PCR products by gel-electrophoresis.

Step (2) is based on a “multiplex” PCR reaction, which combines multiple primer combinations in the same reaction tube. In this kit 6 specific primer combinations are used to amplify mutant as well as wild type (normal variant) alleles of three different genes. Thus, homozygous and heterozygous carriers of the mutations can be identified by one PCR test.

The Genotyping Kit contains DNA diluent (sterile 2 x 3 ml), mastermix for 2 x 11 PCR reactions (2 x 360 µl), size marker (1 x 20 µl), Sybr®Gold I (5 µl sample), 2 ready to use Spreadex® EL 400 Mini gels, 1 gel frame and the Electrophoresis buffer 40 x concentrated .

Example:



| Sample Nr. | 1 | 2 | 3 | 4 | 5 |
|------------------|----|----|----|----|----|
| Factor V | he | ho | wt | he | wt |
| MTHFR | he | ho | wt | ho | wt |
| Factor II | he | wt | wt | he | he |

| Product | Description | REF | Package |
|--|--|---------|----------|
| Genotyping Kit - Venous Thrombosis RUO | 2 x 3 ml DNA Diluent 2 x 360 µl MasterMix 1 x 20 µl Size Marker 1 x 5 µl Sybr®Gold I 2 x Spreadex® EL 400 Mini gels 1 x Gel frame 1 x Electrophoresis Buffer 40 conc | TC11170 | 22 tests |

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