### ADAMTS13 CHROMOGENIC ELISAs

# TECHNOZYM® ADAMTS13 Activity ELISA Prod. #5450701, 96 Tests

12	2 x 8 anti GST strips
1 x	x 12 ml HRP Conjugate
1 x	x 30 ml Reaction Buffer
1 x	x 53 ml Wash Buffer Concentrate
1 x	x 12 ml TMB Substrate
2 x	x 6 ml GST-vWF73 Substrate
1 x	x 12 ml Stop Solution
8 x	x 0.5 ml Calibrators and Controls

### TECHNOZYM® ADAMTS13 INH ELISA Prod. #5450401, 96 Tests | Prod. #5450451, 48 Tests

12 x 8 rec. ADAMTS13 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

### ADAMTS13 FLUOROGENIC ELISA

# TECHNOZYM® ADAMTS13 Activity/Antigen ELISA Prod. #5450501, 2 x 48 Tests | Prod. #5450551, 48 Tests

12/6 x 8 anti-ADAMTS13 strips
1 x 0.3 ml anti-ADAMTS13 Conjugate
1 x 80 ml Wash Buffer Concentrate
1 x 90 ml Incubation Buffer
2/1 x 3 ml Activity Substrate
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

# TECHNOZYM® ADAMTS13 Antigen ELISA Prod. #5450601, 96 Tests

12 x 8 anti ADAMTS13 strips
1 x 0.3 ml anti-ADAMTS13 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

### SCREENING ASSAY KIT

# TECHNOSCREEN® ADAMTS13 Activity Prod. #5700100, 10 Tests

10 x test devices
10 x pre-incubation tubes
1 x 4 ml R1
1 x 1 ml R2
1 x 1 ml R3
11 x large pipettes (300 μl)
22 x small pipettes (60 μl)
1 x Short instruction pad
1 x Reference color chart

### **AUTOMATED ADAMTS13 ASSAY**

### TECHNOFLUOR® ADAMTS13 Activity Assay on CEVERON® s100 Prod. #9822210, 1 Package

Fully automated coagulation analyzer for clotting, chromogenic, turbidimetric assays, TGA and quenching assays.

Visit diapharma.com for our full line of products for TMA research, including anti-Factor H!

## Questions about any product in our lineup?

We're just a click or phone call away.

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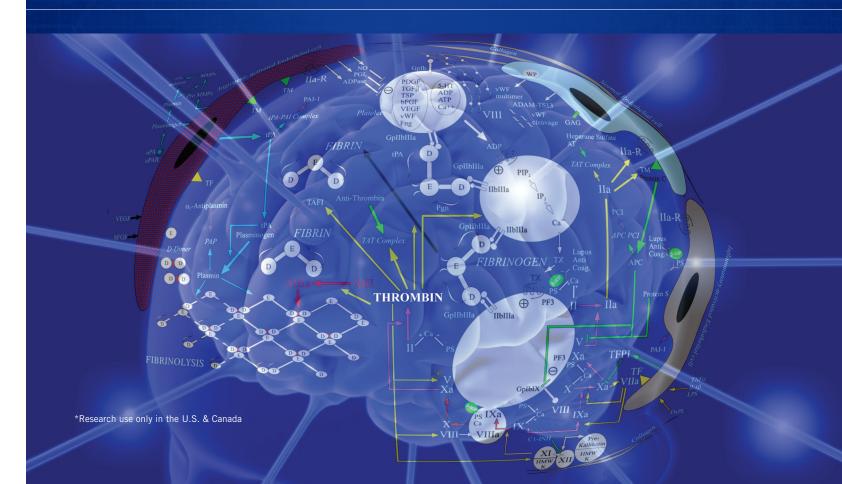


diapharma



## Your partners for ADAMTS13 Research

- Chromogenic Activity ELISA
- Fluorogenic Activity ELISA
- ADAMTS13 Antigen ELISA
- ADAMTS13 Inhibitor ELISA
- Automated ADAMTS13 on the Ceveron s100
- ADAMTS13 Screening Test



\*Research use only in the U.S. & Canada ML-00-00528Rev01

### ADAMTS13

### A Disintegrin and Metalloprotease with ThromboSpondin Motifs

#### Background:

- ADAMTS13 is a plasma protein with low concentration (5 nmol/L) which cleaves very specific large vWF multimeres under laminar flow conditions.
- A functional defect of ADAMTS13 leads to presence of higher molecular weight forms of vWF in plasma and thus to increased platelet aggregation.

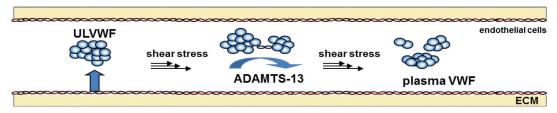
#### Main cause for thrombotic thrombocytopenic purpura (TTP):

- Thrombotic microangiopathy (TMA) is a pathologic state which results in thrombosis in capillaries and arterioles, due to an endothelial injury. The classic TMAs are atypical hemolytic uremic syndrome (aHUS) and TTP.
- TTP occurs at very low ADAMTS13 activity concentration.

#### **ADAMTS13 Function**

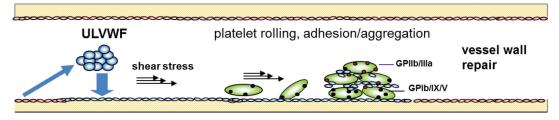
#### Intact vessel wall

ADAMTS13 regulates under normal circumstances the size of vWF multimers



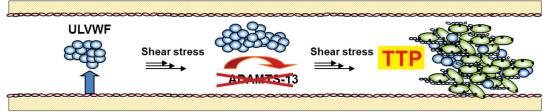
#### Injured/inflamed vessel wall

vWF multimers build a connection between collagen and platelets



### Absence of ADAMTS13

Formation of very large vWF multimers leads to platelet aggregation in healthy vessels -> TTP

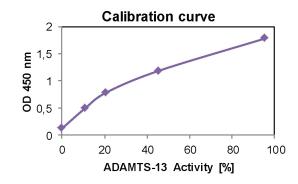


Presentation Dr. Scheiflinger, Laibach June 2004

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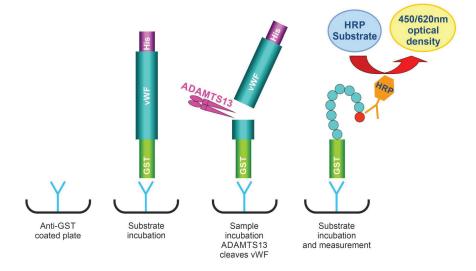
## TECHNOZYM® ADAMTS13 ACTIVITY (CHROMOGENIC) #5450701

### Chromogenic ELISA for the determination of ADAMTS13 activity

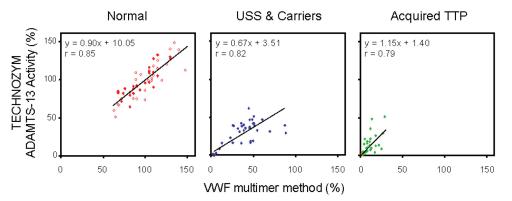


- High sensitivity for ADAMTS13 activity down to 0.01 IU/ml
- Short assay time (3 h)
- Calibrators and Controls are traceable to WHO 1st international Standard ADAMTS13 plasma (NIBSC code 12/252)
- No interference by bilirubin, hemolytic or lipemic samples
- High precision with intra-assay CVs <5% and inter-assay CVs <9%</li>
- Can be used for ADAMTS13 Inhibitor determination in Bethesda assay

### **Test Principle**



### Correlation



Good correlation in ADAMTS13 activity of different groups of samples



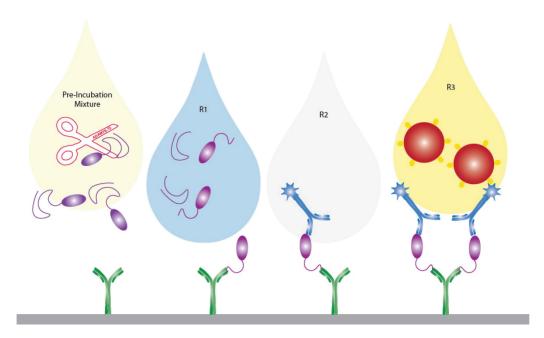
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### TECHNOSCREEN® ADAMTS13 ACTIVITY #5700100

### Semi-quantitative flow through assay for the determination of ADAMTS13 activity levels

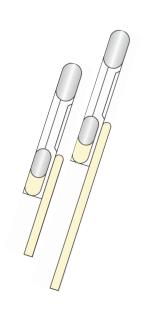
The TECHNOSCREEN® ADAMTS13 is a semiquantitative flow through assay for the determination of ADAMTS13 activity levels in human citrated plasma. This assay is intended as a screening tool for estimating ADAMTS13 activity. Useful for selecting plasmas for ADAMTS13 research.

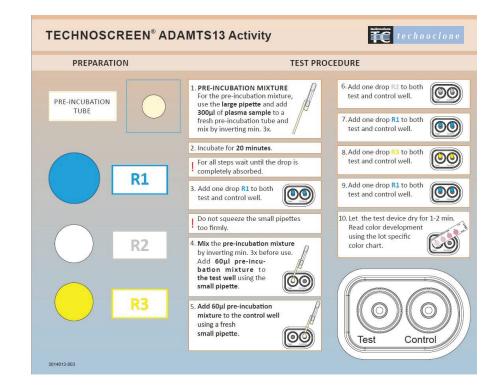
Test plasma is incubated with a vWF fragment. ADAMTS13 specific cleavage of the vWF is then detected with a cleavage site specific antibody by the amount of color development. The amount of cleavage directly correlates to the ADAMTS13 activity level in the plasma sample.

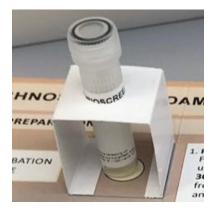


### **Quick & Easy**

- Short instruction with a pre-incubation tube holder included in every package
- Large and small pipettes for the pre-incubation mixture included
- Easy test procedure for rapid results with ready to use reagents
- No additional instrument required
- Results in 30 minutes
- For the interpretation of the results a color chart is included in the kit









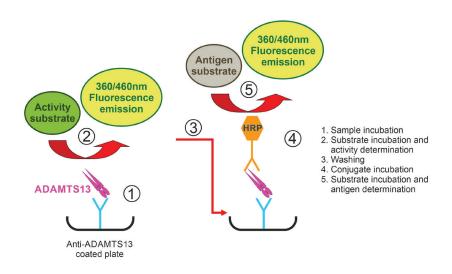






## TECHNOZYM® ADAMTS13 (FLUOROGENIC) #5450501

### Fluorogenic ELISA for the determination of ADAMTS13 antigen and activity



### **Activity and Antigen Determination**

- · Fluorogenic substrate
- Incubation at room temperature
- Calculation tool available for antigen and activity
- Applications available for various fluorogenic readers
- No sample predillution
- Calibrators and Controls are traceable to WHO 1st international Standard ADAMTS13 plasma (NIBSC code 12/252)

## TECHNOZYM® ADAMTS13 ANTIGEN (CHROMOGENIC) #5450601

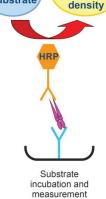
### Chromogenic ELISA for determination of ADAMTS13 antigen concentration

- Measuring range 0.0 1.0 U/ml
- LOD 0.012 U/ml
- High linearity
- Calibrators and Controls are traceable to WHO 1st international Standard ADAMTS13 plasma (NIBSC code 12/252)
- Fast result within approximately 3.5 hours
- Detection is independent of enzyme activity
- Manual or automated test applications available









HRP

450/620nm

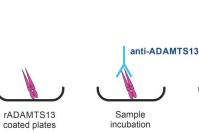
optical

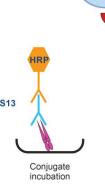
## TECHNOZYM® ADAMTS13 INHIBITOR (CHROMOGENIC)

#### ENIC) #5450401 #5450451

### Chromogenic ELISA for determination of antibodies directed against ADAMTS13

- Differentiation between TTP and non-TTP auto-antibodies
- Measuring range 2 104 U/ml
- LOD 1.68 U/ml
- · High specifity
- Fast result within about 3 hours
- Manual or fully automated testing







measurement

450/620nm

optical

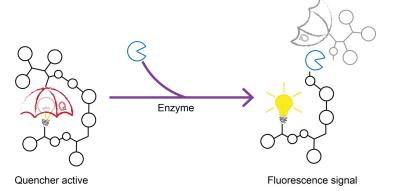
density

HRP

## TECHNOFLUOR® ADAMTS13 ACTIVITY ON CEVERON® s100 #9822210

**Quenching technology** is based on high sensitive fluorescence measurement. Different ways of quenching methods, like dynamic quenching such as fluorescence resonance energy transfer (FRET), or static quenching which can be used.

The **TECHNOFLUOR ADAMTS13 Activity** test uses FRET technology. Due to the quenching reaction the donor fluorophore is activated, and transfers its energy to the quenching molecule which is emitting light. The measured fluorescence signal is proportional to the amount of VWF cleaved by ADAMTS13.



### Time and Cost Saving

• Save valuable plasma and financial resources

#### **Easy and Fast**

- Fully automated ADAMTS13 activity result in less than 30 minutes
- Run ADAMTS13 activity sample as easily as a routine coagulation test
- Quenching module using parameters can be run in paralell to all other parameters including TGA
- Stable lot calibration curve with a high linearity



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