

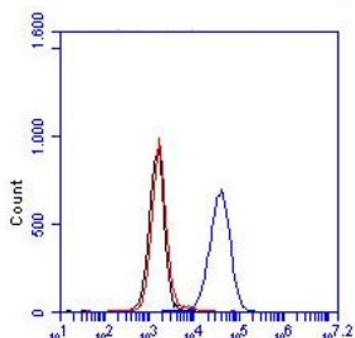
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	TFPI Kunitz-1, Human, clone CLB/TFPI Kunitz-1		
Catalog number	HM2351		
Lot number	-	Expiry date	-
Volume	1 ml	Amount	100 µg
Formulation	0.2 µm filtered in 20 mM TRIS, 150 mM NaCL, pH 8.0.	Concentration	100 µg/ml
Host Species	Mouse IgG1	Conjugate	None
Endotoxin	N.A.	Purification	Protein A
Storage	4°C		

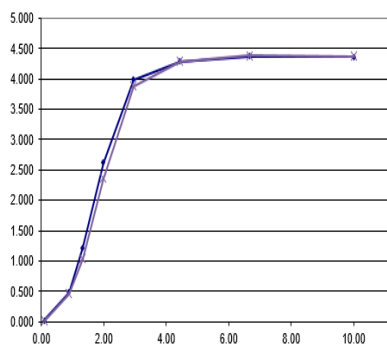
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes				•		•		•
No								
N.D.	•	•	•		•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometry with HM2351. The black line represents HUVEC cells only, the red line the control and the blue line HM2351 in a concentration of 10 µg/ml.



IA: HM2351 was used as detection antibody to detect TFPI in HUVEC cells.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: HM2351 can be used as a detection antibody.
- FC: Antibody CLB/TFPI Kunitz-1 stains the extracellular domain of TFPI.
- W: A non-reduced sample treatment was used with Huvec lysate. The expected band size is 43 kDa.
- Positive control: Endothelial and smooth muscle cells.

General Information

Description

Antibody CLB/TFPI Kunitz-1 recognizes the Kunitz domain 1 (aa 12 - 88) of TFPI. TFPI (tissue factor pathway inhibitor) is a single-chain polypeptide serine protease inhibitor that regulates the tissue factor (TF)-dependent pathway of blood coagulation. The coagulation process initiates with the formation of a factor VIIa-TF complex, which proteolytically activates additional proteases (factors IX and X) and ultimately leads to the formation of a fibrin clot. TFPI is known to interact and inhibit the activated factor X and VIIa-TF proteases in an autoregulatory loop. TFPI is a dual inhibitor, binding to the TF/FVIIa complex to prevent it from acting on its FIX and FX substrates, and by directly inhibiting FXa. Inadequate down-regulation of FXa function by TFPI deficiency leads to thrombosis. Besides coagulation, TFPI may play additional roles in innate immunity, microbial defense, inflammation, angiogenesis, lipid metabolism, and cellular signaling, proliferation, migration and apoptosis. Tissue factor pathway inhibitor (TFPI) Kunitz-1 is a multivalent, Kunitz-type proteinase inhibitor, which, due to alternative mRNA splicing, is transcribed in three isoforms: TFPIalpha, TFPIdelta, and glycosyl phosphatidyl inositol (GPI)-anchored TFPIbeta. The microvascular endothelium is thought to be the principal source of TFPI and TFPIalpha is the predominant isoform expressed in humans. TFPI consists of an

acidic aminoterminal polypeptide, followed by 3 tandem Kunitz-type domains (Kunitz domains 1, 2, and 3) and a basic carboxyterminal tail. The Kunitz domains are the active protease inhibiting domains of TFPI. The domains are relatively small with a length of about 50 to 60 amino acids and a molecular weight of 6 kDa. The Kunitz-1 domain is responsible for factor Xa-dependent inhibition of the factor VIIa/tissue factor catalytic complex.

Aliases Tissue factor pathway inhibitor, Extrinsic pathway inhibitor

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Robbert Zwinkels

Date
16/03/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.