

Datasheet for ABIN1672813

TFPI ELISA Kit[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	96 tests
Target:	TFPI
Binding Specificity:	AA 29-282
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human TFPI
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: D29-K282
Specificity:	Expression system for standard: NSO Immunogen sequence: D29-K282
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	TFPI
Alternative Name:	TFPI (TFPI Products)
Background:	<p>Protein Function: Inhibits factor X (X(a)) directly and, in a Xa-dependent way, inhibits VIIa/tissue factor activity, presumably by forming a quaternary Xa/LACI/VIIa/TF complex. It possesses an antithrombotic action and also the ability to associate with lipoproteins in plasma.</p> <p>Background: TFPI(Tissue factor pathway inhibitor),also known as EPI, LACI or TFPI1, is a single-chain polypeptide which can reversibly inhibit Factor Xa(Xa) and Thrombin(Factor IIa). The gene for TFPI is located on chromosome 2q31-q32.1, and has nine exons which span 70 kb. TFPI consists of a highly negatively-charged amino-terminus, three tandemly-linked Kunitz domains, and a highly positively-charged carboxy-terminus.TFPI contributes significantly to the inhibition of Xa in vivo, despite being present at concentrations of only 2.5 nM.</p> <p>Synonyms: Tissue factor pathway inhibitor,TFPI,Extrinsic pathway inhibitor,EPI,Lipoprotein-associated coagulation inhibitor,LACI,TFPI,LACI, TFPI1,</p> <p>Full Gene Name: Tissue factor pathway inhibitor</p> <p>Cellular Localisation: Isoform Alpha: Secreted.</p>
Gene ID:	7035
UniProt:	P10646

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 3 BPTI/Kunitz inhibitor domains. Tissue Specificity: Mostly in endothelial cells.
Plate:	Pre-coated
Protocol:	human TFPI ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay

Application Details

technology. A monoclonal antibody from mouse specific for TFPI has been precoated onto 96-well plates. Standards(NSO, D29-K282) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TFPI is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human TFPI amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human TFPI standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human TFPI standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 313, Standard deviation: 16.3, CV(%): 5.2
- Sample 2: n=16, Mean(pg/ml): 572, Standard deviation: 24.6, CV(%): 4.3
- Sample 3: n=16, Mean(pg/ml): 1215, Standard deviation: 47.4, CV(%): 3.9,
- Sample 1: n=24, Mean(pg/ml): 327, Standard deviation: 21.6, CV(%): 6.6
- Sample 2: n=24, Mean(pg/ml): 588, Standard deviation: 34.1, CV(%): 5.8
- Sample 3: n=24, Mean(pg/ml): 1279, Standard deviation: 79.3, CV(%): 6.2

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

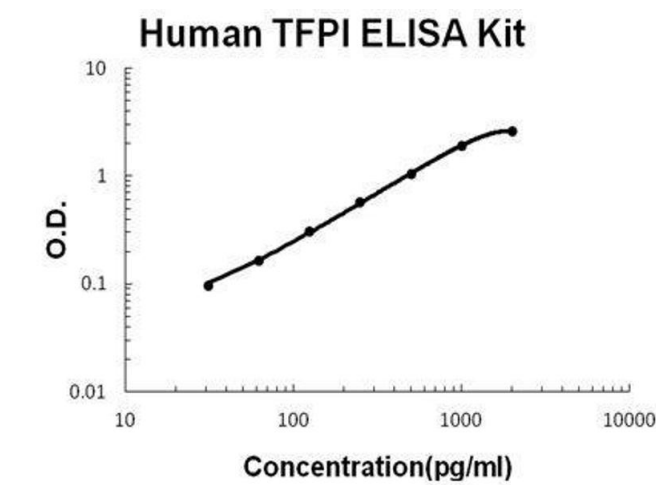
Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months

Publications

Product cited in: Gungor, Unal, Guclu, Gezer, Eyileten, Guzel, Altunoren, Erken, Oguz, Kocyigit, Yilmaz: "IL-33 and ST2 levels in chronic kidney disease: Associations with inflammation, vascular abnormalities, cardiovascular events, and survival." in: **PLoS ONE**, Vol. 12, Issue 6, pp. e0178939, (2017) ([PubMed](#)).



ELISA

Image 1. Human TFPI PicoKine ELISA Kit standard curve