

Anti-TFPI2 Picoband Antibody

Catalog # ABO10008

Product Information

Application	WB, IHC-P
Primary Accession	P48307
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tissue factor pathway inhibitor 2(TFPI2) detection. Tested with WB, IHC-P in Human;Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7980
Other Names	Tissue factor pathway inhibitor 2, TFPI-2, Placental protein 5, PP5, TFPI2
Calculated MW	26934
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human, Mouse
Subcellular Localization	Secreted.
Tissue Specificity	Umbilical vein endothelial cells, liver, placenta, heart, pancreas, and maternal serum at advanced pregnancy.
Source	Eukaryota
Protein Name	Tissue factor pathway inhibitor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TFPI2 (70-105aa EGNANNFYTWEACDDACWRIEKVPKVCRLQVSVDDQ).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also

be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	TFPI2
Function	May play a role in the regulation of plasmin-mediated matrix remodeling. Inhibits trypsin, plasmin, factor VIIa/tissue factor and weakly factor Xa. Has no effect on thrombin.
Cellular Location	Secreted.
Tissue Location	Umbilical vein endothelial cells, liver, placenta, heart, pancreas, and maternal serum at advanced pregnancy

Background

Tissue factor pathway inhibitor 2, also known as TFPI2, is a human gene which is located at 7q22. It is an important regulator of the extrinsic pathway of blood coagulation through its ability to inhibit factor Xa and factor VIIa-tissue factor activity. After a 22-residue signal peptide, the mature TFPI2 protein contains 213 amino acids with 18 cysteines and 2 canonical N-linked glycosylation sites. The purified recombinant TFPI2 strongly inhibited the amidolytic activities of trypsin and the factor VIIa-tissue factor complex. The latter inhibition was markedly enhanced in the presence of heparin. Mouse TFPI2 mRNA is highly expressed in developing mouse placenta, as in human. And there are also high transcript levels in adult mouse liver and kidney.

Images

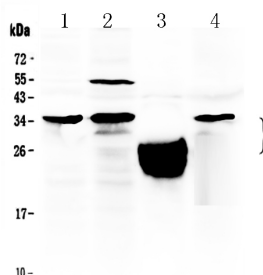
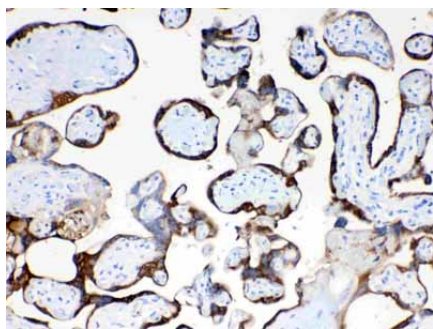


Figure 1. Western blot analysis of TFPI2 using anti- TFPI2 antibody (ABO10008). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse spleen tissue lysates, Lane 2: HELA whole Cell lysates, Lane 3: human placenta tissue lysates, Lane 4: MCF-7 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- TFPI2 antigen affinity purified polyclonal antibody (Catalog # ABO10008) at 0.5 µg/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for TFPI2 at approximately 27KD, 35KD. The expected band size for TFPI2 is at 27KD.

Figure 2. IHC analysis of TFPI2 using anti- TFPI2 antibody (ABO10008).TFPI2 was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6,



epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- TFPI2 Antibody (ABO10008) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.