

Anti-TFPI2 Picoband Antibody

Catalog # ABO10008

Specification

Anti-TFPI2 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP48307HostRabbitReactivityHuman, MouseClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Tissue factor pathway inhibitor 2(TFPI2) detection. Tested withWB, IHC-P in Human; Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TFPI2 Picoband Antibody - Additional Information

Gene ID 7980

Other Names Tissue factor pathway inhibitor 2, TFPI-2, Placental protein 5, PP5, TFPI2

Calculated MW 26934 MW KDa

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.

Protein Name Tissue factor pathway inhibitor 2

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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.

Anti-TFPI2 Picoband Antibody - 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

Anti-TFPI2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-TFPI2 Picoband Antibody - 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 1¹/₄g/mL overnight at 4ŰC, 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.

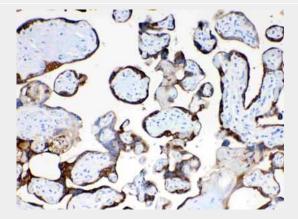


Figure 2. IHC analysis of TFPI2 using anti- TFPI2 antibody (ABO10008).TFPI2 was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 11^{1} /4g/ml rabbit anti-TFPI2 Antibody (ABO10008) overnight at $4A^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at $37A^{\circ}$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-TFPI2 Picoband Antibody - 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.