Mouse TFPI Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2975

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TFPI in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant human TFPI and less than 5% cross-reactivity with recombinant mouse TFPI-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TFPI Leu29-Lys289 Accession # O54819
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

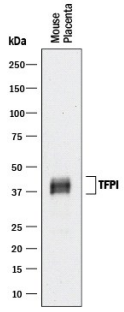
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse TFPI (Catalog # 2975-PI), see our available Western blot detection antibodies
Simple Western	100 µg/mL	See Below

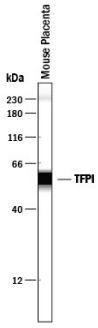
DATA

Western Blot



Detection of TFPI by Western Blot. Western blot shows lysate of mouse placenta tissue. PVDF membrane was probed with 2 µg/mL of Goat Anti-Mouse TFPI Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2975) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for TFPI at approximately 37-42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Mouse TFPI by Simple Western™. Simple Western lane view shows lysates of mouse placenta tissue, loaded at 0.2 mg/mL. A specific band was detected for TFPI at approximately 50-60 kDa (as indicated) using 100 µg/mL of Goat Anti-Mouse TFPI Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2975) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Tissue Factor Pathway Inhibitor (TFPI), also known as lipoprotein-associated coagulation inhibitor (LACI) and extrinsic pathway inhibitor (EPI), is a physiological inhibitor of extrinsic pathway of coagulation and has biological functions of anticoagulation and anti-inflammation (1). It is a secreted protein with an N-terminal acidic region, three Kunitz (K) domains separated by two linker regions, and a C-terminal basic region (2). The first K domain (residues 50-100) inhibits coagulation factor VIIa complexed to tissue factor (TF). The second K domain (residues 121-171) inhibits factor Xa. The third K domain (residues 225-275) binds to heparin (3). The C-terminal basic region may have several functions. For example, it plays an important role in the binding of TFPI to cell surfaces (2). The purified recombinant mouse TFPI ends at residue 289 and does not contain the last 17 residues (residues 290-306) in the C-terminal region. It inhibits the activity of recombinant human Coagulation Factor VII (R&D Systems, Catalog # 2338-SE) in the presence of recombinant human Tissue Factor (Catalog # 2339-PA) .

References:

1. Bai, H. *et al.* (2005) Thromb Haemost. **93**:1055.
2. Bajaj, M.S. *et al.* (2001) Thromb Haemost. **86**:959.
3. Mine, S. *et al.* (2002) Biochemistry **41**:78.

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