

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse TFPI in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody shows no cross-reactivity with recombinant human (rh) TFPI or rmTFPI-2.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 372311
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse TFPI Leu29-Lys289 Accession # O54819
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Mouse TFPI (Catalog # <a href="#">2975-PI</a> ) under non-reducing conditions only

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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 a 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 to 100) inhibits coagulation factor VIIa complexed to tissue factor (TF). The second K domain (residues 121 to 171) inhibits factor Xa. The third K domain (residues 225 to 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 to 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 (R&D Systems, Catalog # 2339-PA).

#### References:

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