

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TFPI-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant mouse TFPI-2 is observed and less than 5% cross-reactivity with recombinant human TFPI-1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human TFPI-2 Asp23-Lys213 Accession # P48307
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human TFPI-2 (Catalog # 2545-PI)
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human TFPI-2 (Catalog # 2545-PI), see our available <a href="#">Western blot detection antibodies</a>
<b>Neutralization</b>	Measured by its ability to neutralize Recombinant Human TFPI-2 (0.17 µg/mL, Catalog # 2545-PI) inhibition of Trypsin (0.05 µg/mL) cleavage of the fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH <sub>2</sub> (10 µM, Catalog # ES002). The Neutralization Dose (ND <sub>50</sub> ) is typically 1.4 µg/mL.	

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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

Human Tissue Factor Pathway Inhibitor 2 (TFPI-2), also known as placental protein 5 (PP5) and retinal pigment epithelial cell factor 1 (REF-1), is a secreted protein with a N-terminal acidic region, three Kunitz (K) domains (residues 36 to 86, 96 to 149 and 158 to 208) separated with by two linker regions, and a C-terminal basic region (1-3). Expression of TFPI-2 is down-regulated in several cancers, which may contribute to tumor progression in these cancers (4). The purified recombinant human TFPI-2 ends at residue 213 and does not contain the last 22 residues (residues 214 to 235) 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:

1. Miyagi, Y. *et al.* (1994) *J. Biochem.* **116**:939.
2. Sprecher, C.A. *et al.* (1994) *Proc. Natl. Acad. Sci. USA* **91**:3353.
3. Tanaka, Y. *et al.* (2004) *Invest. Ophthalmol. Vis. Sci.* **45**:245.
4. Rollin, J. *et al.* (2005) *Br. J. Cancer* **92**:775.