

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFPI-2 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 243227
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TFPI-2 Asp23-Phe235 Accession # P48307
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 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
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human TFPI-2 (Catalog # 2545-PI), see our available Western blot detection antibodies
Neutralization	Measured by its ability to neutralize Recombinant Human TFPI-2 (0.017 µg/mL, Catalog # 2545-PI) inhibition of Trypsin (0.025 µg/mL) cleavage of the fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH ₂ (10 µM, Catalog # ES002). The Neutralization Dose (ND ₅₀) is typically 0.45 µg/mL.	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

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 (Catalog # 2338-SE) in the presence of Recombinant Human Tissue Factor (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.