

**Synonym**

TFPI2,PP5,REF1

**Source**

Human TFPI-2, His Tag (TF2-H5227) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Lys 213 (Accession # NP\_006519.1).

Predicted N-terminus: Asp 23

**Molecular Characterization**

TFPI-2(Asp 23 - Lys 213)  
NP\_006519.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 22.7 kDa. The protein migrates as 26-32 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

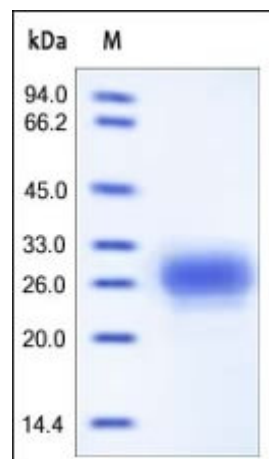
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

No activity loss was observed after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human TFPI-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Background**

Tissue Factor Pathway Inhibitor 2 (TFPI2) is also known as placental protein 5 (PP5) and retinal pigment epithelial cell factor 1 (REF1), is a member of the Kunitz-type serine proteinase inhibitor family, is a structural homologue of tissue factor pathway inhibitor (TFPI). TFPI2 is highly abundant in the full-term placenta and widely expressed in umbilical vein endothelial cells, liver, placenta, heart, pancreas, and maternal serum at advanced pregnancy. TFPI2 may play a role in the regulation of plasmin-mediated matrix remodeling. Inhibits trypsin, plasmin, factor VIIa/tissue factor and weakly factor Xa and has no effect on thrombin. Reduced synthesis of TFPI-2 has been related to numerous pathophysiological processes such as inflammation, angiogenesis, atherosclerosis, retinal degeneration and tumor growth / metastasis.

## References

- (1) [Rao C.N., et al., 1995, Arch. Biochem. Biophys. 317:311-314.](#)
- (2) [Tanaka Y., et al., 2004, Invest. Ophthalmol. Vis. Sci. 45:245.](#)
- (3) [Rollin J., et al., 2005, Br J Cancer. 92\(4\):775-83.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.