

## Recombinant Human TFPI2 protein (His Tag)

**Catalog Number:** PDMH100053

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

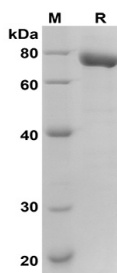
### Description

|                      |                                                                              |
|----------------------|------------------------------------------------------------------------------|
| <b>Species</b>       | Human                                                                        |
| <b>Source</b>        | HEK293 Cells-derived Human TFPI2 protein Met1-Phe235, with an C-terminal His |
| <b>Calculated MW</b> | 25.7 kDa                                                                     |
| <b>Observed MW</b>   | 75 kDa                                                                       |
| <b>Accession</b>     | P48307                                                                       |
| <b>Bio-activity</b>  | Not validated for activity                                                   |

### Properties

|                       |                                                                                                                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 95% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| <b>Endotoxin</b>      | < 1.0 EU/mg of the protein as determined by the LAL method                                                                                                                                                                             |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                        |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.                                                                                               |

### Data



SDS-PAGE analysis of Human TFPI2 proteins, 2µg/lane of Recombinant Human TFPI2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 75 KD.

### Background

### For Research Use Only

Tissue factor pathway inhibitor-2 (TFPI2), a member of the Kunitz-type serine proteinase inhibitor family, is a structural homologue of tissue factor pathway inhibitor (TFPI). It is a 32 kDa matrix-associated glycoprotein consisting of a short amino-terminal region, three tandem Kunitz-type domains and a positively charged carboxy-terminal tail. TFPI2 inhibits plasmin-dependent activation of several metalloproteinases. TFPI2 is highly abundant in the full-term placenta and widely expressed in various adult human tissues, such as the liver, skeletal muscle, heart, kidney, and pancreas. The expression of TFPI2 in tumors is inversely related to an increasing degree of malignancy, which may suggest a role for TFPI2 in the maintenance of tumor stability and inhibition of the growth of neoplasms. TFPI2 inhibits the tissue factor/factor VIIa (TF/VIIa) complex and a wide variety of serine proteinases including plasmin, plasma kallikrein, factor Xa, trypsin, and chymotrypsin. TFPI2 is involved in regulating pericellular proteases implicated in a variety of physiologic and pathologic processes including cancer cell invasion, vascular inflammation, and atherosclerosis. TFPI2 has also been shown to induce apoptosis and inhibit angiogenesis, which may contribute significantly to tumor growth inhibition.