Datasheet for ABIN7198257

TFPI2 Protein (His tag)

Go to Product page

Overview

Quantity:	50 µg
Target:	TFPI2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TFPI2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human TFPI2 Protein (His Tag)(Active)
Sequence:	Met 1-Lys 213
Characteristics:	A DNA sequence encoding the human TFPI2 (NP_006519.1) precursor (Met 1-Lys 213) was expressed with a C-terminal polyhistidine tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2 (Anaspec, Catalog#27114). The IC50 value is < 2 nM, as measured in 100µL reaction mixture containing 1.25 ng trypsin (Sigma, Catalog#T4799), 10 µM substrate, 50 mM Tris, 10 mM CaCl2, 0.15M NaCl , 0.05% Brij-35, pH 7.5.

Target Details

Target:	TFPI2
Alternative Name:	TFPI2 (TFPI2 Products)
Background:	Background: 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 XIa, 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. Synonym: Tissue Factor Pathway Inhibitor 2, TFPI-2, Placental Protein 5, PP5, TFPI2
Molecular Weight:	23.2 kDa
NCBI Accession:	NP_006519

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	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.