

Human CellExp™ TFPI, human recombinant

CATALOG #: 7453-10 10 µg

ALTERNATE NAMES: TFPI, LACI, TFPI1, EPI, TFI

SOURCE: HEK 293 cells (Asp 29 – Lys 282)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: This protein is fused with 6xHis tag at the C-terminus, has a calculated MW of 30 kDa. The predicted N-terminus is Asp 29. DTT-reduced Protein migrates as 41-45 kDa due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

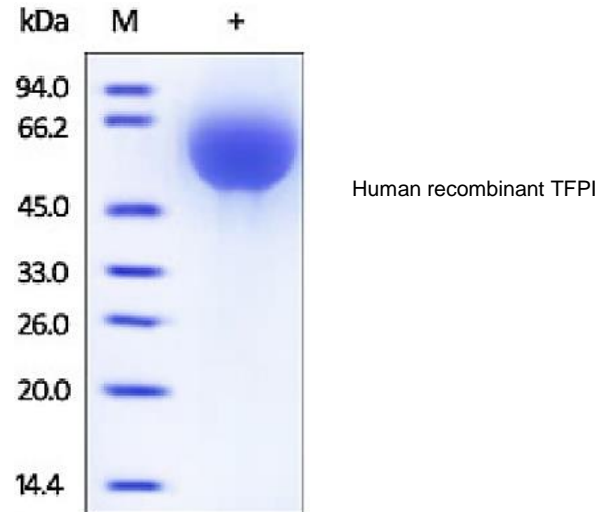
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Tissue factor pathway inhibitor (TFPI) also known as Extrinsic pathway inhibitor (EPI), Lipoprotein - associated coagulation inhibitor (LACI), is a plasma proteinase inhibitor synthesized by vascular endothelial cells and part of it is associated with glycosaminoglycans of these cells. TFPI is a single-chain polypeptide which can reversibly inhibit Factor Xa (Xa) and Thrombin (Factor IIa). TFPI is a secreted protein with a N-terminal acidic region, three Kunitz (K) domains separated with by two linker regions, and a C-terminal basic region. The first K domain inhibits coagulation factor VIIa complexed to tissue factor (TF); The second K domain inhibits factor Xa; The third K domain binds to heparin; The C-terminal basic region may have several functions. For example, it plays an important role in binding of TFPI to cell surfaces.

BIOLOGICAL ACTIVITY: Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca - RPKPVE - Nval – WRK (Dnp) - NH₂. The IC₅₀ value is < 0.35 nM, as measured in 100 µl reaction mixture containing 1.25 ng trypsin, 10 µM substrate, 50 mM Tris, 10 mM CaCl₂, 150 mM NaCl, 0.05% Brij-35 (w/v), pH 7.5.



RELATED PRODUCTS:

- ApoA-1, human recombinant (Cat # 4693-20, -100, -1000)
- ApoA-1, rat recombinant (Cat # 4695-20, -100, -1000)
- Apo-D, human recombinant (Cat # 4326-10, -1000)
- APO-J / Clusterin (Cat. No. 4325-10, -500)
- Apo-SAA, human recombinant (Cat # 4324-50, -500, -1000)
- ApoE2, human recombinant (Cat # 4760-50, -100, -500, -1000, -5000)
- ApoE3, human recombinant (Cat # 4696-50, -100, -500, -5000)
- ApoE4, human recombinant (Cat # 4699-50, -100, -500, -1000, -5000)
- Apolipoprotein CI, Human Plasma (Cat # 4703-100)
- Apolipoprotein CII, Human Plasma (Cat # 4704-50)
- Apolipoprotein CIII, Human Plasma (Cat # 4706-100)

FOR RESEARCH USE ONLY! Not to be used in humans.

