

Synonym

TFPI,LACI,TFPI1,EPI,TFI

Source

MABSol® Biotinylated Human TFPI, His Tag, primary amine labeling (TFI-H8226) is expressed from human HEK293 cells. It contains AA Asp 29 - Lys 282 (Accession # [NP_006278.1](#)). It is the biotinylated form of Human TFPI, His Tag (TFI-H5226).

Predicted N-terminus: Asp 29

Molecular Characterization

TFPI(Asp 29 - Lys 282)
NP_006278.1 Poly-his

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

The protein has a calculated MW of 30.0 kDa. The protein migrates as 41-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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

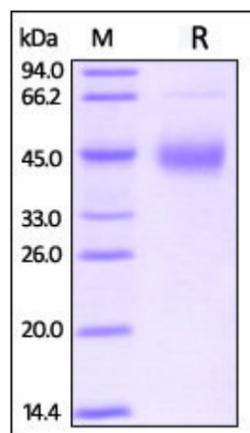
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable 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



Biotinylated Human TFPI, His Tag, primary amine labeling 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 (TFPI) is 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 Nterminal acidic region, three Kunitz (K) domains separated with by two linker regions, and a Cterminal 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 Cterminal basic region may have several functions. For example, it plays an important role in binding of TFPI to cell surfaces.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.