

## Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

## Recombinant Human TFPI Protein (His tag)

Cat.NO.: TP07953

3th Edition

Synonyms: EPI; LACI; TFI; TFPI1

**Description:** Tissue factor pathway inhibitor (TFPI) is the natural inhibitor of TF coagulant and signaling activities. It is a Kunitz-type serine proteinase inhibitor that down-regulates tissue factor-initiated blood coagulation. With its Kunitz domains, TFPI exhibits significant homology with human inter-alpha-trypson inhibitor and bovin basic pancreatic trypsin inhibitor. TFPI is the natural inhibitor of TF coagulant and signaling activities. The importance of TFPI in the regulation of blood coagulation is emphasized by how its activity is modulated in human disease. In a factor (F) Xa-dependent feedback system, TFPI binds directly and inhibits the TF-FVII/FVIIa complex. Normally, TFPI exists in plasma both as a full-length molecule and as variably carboxy-terminal truncated forms. TFPI also circulates in complex with plasma lipoproteins. The levels and the dual inhibitor effect of TFPI on FXa and TF-FVII/FVIIa complex offers insight into the mechanisms of various pathological conditions triggered by TF. TFPI may play an important role in modulating TF-induced thrombogenesis and it may also provide a unique therapeutic approach for prophylaxis and/or treatment of various diseases. In addition, Studies have shown that TFPI exhibits antiangiogenic and antimetastatic effects in vitro and in vivo. In animal models of experimental metastasis, both circulating and tumor cell-associated TFPI are shown to significantly reduce tumor cell-induced coagulation activation and lung metastasis.

Form:PBS

Molecular Weight: 30.6 kDa

Sequences: Met 1-Lys 282

Purity:> 95% by HPLC

**Concentration:** 

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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