



# Recombinant Protein Technical Manual

## Recombinant Mouse Tissue Factor/TF Protein (His Tag)

RPES0538

### Product Data:

**Product SKU:** RPES0538

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P20352

### Protein Information:

**Molecular Mass:** 26.2 kDa

**AP Molecular Mass:** 35-42 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 0.05%Brij35, pH7.5.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Tissue factor; TF; Coagulation factor III;

## Immunogen Information:

**Sequence:** Ala29-Glu251

## Background:

Tissue Factor, also known as thromboplastin and CD142, belongs to the tissue factor family which contains 294 amino acid (aa). Mouse TF consists of a signal peptide (residues 1-28) and the mature chain (residues 29-294). It is a single-pass type I membrane protein that expressed in the liver oscillates in a circadian manner. Interacts with HSPE; the interaction, inhibited by heparin, promotes the generation of activated factor X and activates coagulation in the presence of activated factor VII. Initiates blood coagulation by forming a complex with circulating factor VII or VIIa. The [TF:VIIa] complex activates factors IX or X by specific limited proteolysis. TF plays a role in normal hemostasis by initiating the cell-surface assembly and propagation of the coagulation protease cascade.