

## Product datasheet for TP720578M

## OriGene Technologies, Inc.

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## Tissue Factor (F3) (NM 001993) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of Homo sapien Tissue Factor/TF is produced by our mammalian

expression system in human cells. The target protein is expressed with human TF fused with

a polyhistidine tag at the C-terminus.

Species: Human Expression Host: HEK293

Expression cDNA Clone

or AA Sequence:

Gly34-Glu251

Tag: C-His

Predicted MW: 27.0 kDa

Concentration: lot specific

**Purity:** >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

**Endotoxin:** < 0.1 EU per μg protein as determined by LAL test

**Reconstitution Method:** Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the

lyophilized protein in ddH2O. It is not recommended to reconstitute a concentration less than 100  $\mu$ g/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage: Store at -80°C.

Stability: Stable for at least 6 months from date of receipt under proper storage and handling

conditions.

**RefSeq:** NP 001984

 Locus ID:
 2152

 UniProt ID:
 P13726

 Cytogenetics:
 1p21.3

Synonyms: CD142; TF; TFA





**Summary:** 

This gene encodes coagulation factor III which is a cell surface glycoprotein. This factor enables cells to initiate the blood coagulation cascades, and it functions as the high-affinity receptor for the coagulation factor VII. The resulting complex provides a catalytic event that is responsible for initiation of the coagulation protease cascades by specific limited proteolysis. Unlike the other cofactors of these protease cascades, which circulate as nonfunctional precursors, this factor is a potent initiator that is fully functional when expressed on cell surfaces, for example, on monocytes. There are 3 distinct domains of this factor: extracellular, transmembrane, and cytoplasmic. Platelets and monocytes have been shown to express this coagulation factor under procoagulatory and proinflammatory stimuli, and a major role in HIV-associated coagulopathy has been described. Platelet-dependent monocyte expression of coagulation factor III has been described to be associated with Coronavirus Disease 2019 (COVID-19) severity and mortality. This protein is the only one in the coagulation pathway for which a congenital deficiency has not been described. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Aug 2020]

Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Complement and coagulation cascades

## **Product images:**

