Recombinant TF protein (His tag)

Catalog Number	544402
Synonyms	TF; Coagulation factor III; Thromboplastin; CD antigen CD142
Species	Human
Expression System	E. coli
Accession	P13726
Molecular Weight	Predictes a molecular mass of 26.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	37-251
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 37-251 aa (P13726) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment of human Tissue Factor (TF), also known as Coagulation Factor III, Thromboplastin, or CD142, corresponding to amino acids 37-251. This 215-amino acid fragment is designed to be a stable and soluble unit, ideal for structural studies and biochemical assays investigating its role in initiating the coagulation cascade. Tissue Factor (TF) is a key initiator of blood coagulation, functioning by forming a complex with circulating factor VII or VIIa. The resulting [TF:VIIa] complex activates factors IX and X through specific limited proteolysis, playing an essential role in normal hemostasis by triggering the cell-surface assembly and propagation of the coagulation protease cascade. In its full-length form, isoform 1 is a single-pass type I membrane protein localized to the membrane, while isoform 2 is secreted, highlighting its critical involvement in cellular signaling and coagulation pathways.