

Human Coagulation factor III/Tissue Factor Protein, Ultra Low Endotoxin



Cat. No. TFR-HM101-UL

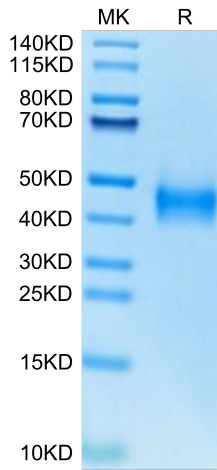
Description	
Source	Recombinant Human Coagulation factor III/Tissue Factor Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ser33-Glu251.
Accession	P13726-1
Molecular Weight	The protein has a predicted MW of 25.89 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background	
Tissue factor (also named Coagulation Factor III) is a cell surface glycoprotein responsible for initiating the extrinsic pathway of coagulation. Tissue factor is the primary cellular initiator of blood coagulation via interaction with coagulation factor VII. Aberrant expression of tissue factor is responsible for thrombosis during septic shock, atherosclerosis and cancer.	

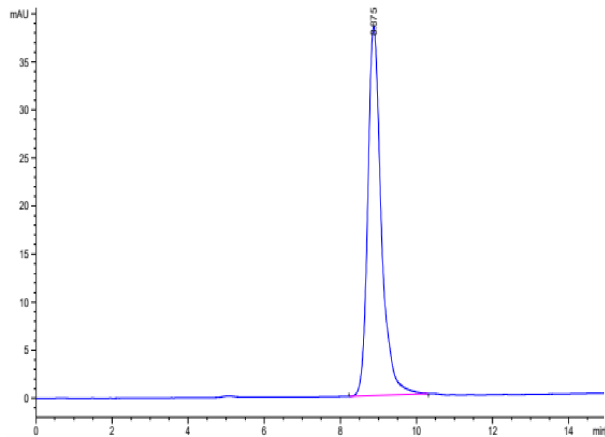
Assay Data

Bis-Tris PAGE



Human Coagulation factor III on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



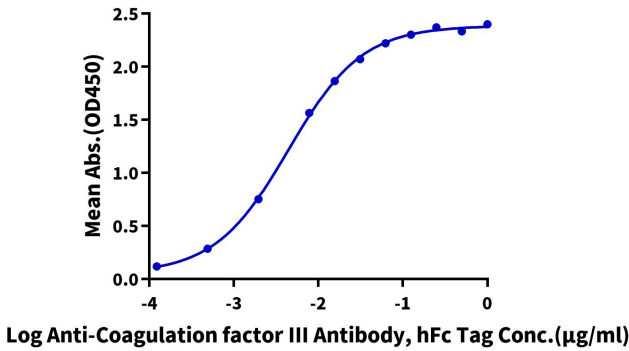
The purity of Human Coagulation factor III is greater than 95% as determined by SEC-HPLC.

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Assay Data

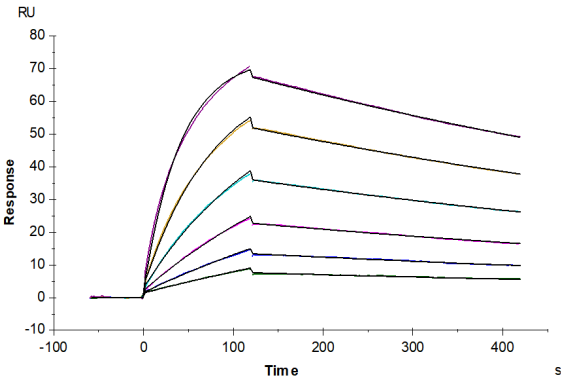
ELISA Data

Human Coagulation Factor III, His Tag ELISA
0.2µg Human Coagulation Factor III, His Tag Per Well



Immobilized Human Coagulation factor III, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-Coagulation factor III Antibody, hFc Tag with the EC50 of 4.4ng/ml determined by ELISA (QC Test).

SPR Data



Anti-Coagulation factor III Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human Coagulation Factor III, His Tag with an affinity constant of 9.25 nM as determined in SPR assay (Biacore T200).

Bioactivity Data

Measured by its ability to activate Coagulation Factor VII in cleaving a fluorogenic peptide substrate Boc-VPR-AMC. The AC50 is <4 µg/mL.