Recombinant Human F3 Protein (Met1-Ser295), His-tagged

Cat. No. F3-565H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human F3 Protein (NP_001984.1) (Met1-Ser295) was produced by Baculovirus-Insect Cells expression system. This protein was expressed with a polyhistidine tag at the C-terminus.
Species	Human
Source	Insect Cells
ProteinLength	Met1-Ser295
Description	Tissue factor (TF), also known as coagulation factor III, F3, and CD142, is a single-pass type I membrane protein which belongs to the tissue factor family. Tissue factor is one of the proteins that participate in hemostatic and inflammatory processes. Activated monocytes present in the liver increase expression of tissue factor, and while accumulating in the organ they can intensify inflammation. Tissue factor is the protein that activates the blood clotting system by binding to, and activating, the plasma serine protease, factor VIIa, following vascular injury. Tissue factor is not only the main physiological initiator of normal blood coagulation, but is also important in the natural history of solid malignancies in that it potentiates metastasis and angiogenesis and mediates outside-in signalling. Tissue factor is expressed constitutively by many tissues which are not in contact with blood and by other cells upon injury or activation; the latter include endothelial cells, tissue macrophages, and peripheral blood monocytes. Coagulation Factor III is a transmembrane glycoprotein that localizes the coagulation serine protease factor VII/VIIa (FVII/VIIa) to the cell

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	surface. The primary function of TF is to activate the clotting cascade. The TF:FVIIa complex also activates cells by cleavage of a G-protein coupled receptor called protease-activated receptor 2 (PAR2). TF is expressed by tumor cells and contributes to a variety of pathologic processes, such as thrombosis, metastasis, tumor growth, and tumor angiogenesis. As a key regulator of haemostasis and angiogenesis, it is also involved in the pathology of several diseases, including cardiovascular, inflammatory and neoplastic conditions.
Predicted N Terminal	Ser 33
Form	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant human F3 consists of 274 amino acids and predicts a molecular mass of 31 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 90 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4℃ before opening to recover the entire contents.

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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.

GENE INFORMATION

Gene Name	F3 coagulation factor III (thromboplastin, tissue factor) [Homo sapiens]
Official Symbol	F3
Synonyms	F3; coagulation factor III (thromboplastin, tissue factor); tissue factor; CD142; TF; TFA; FLJ17960;
Gene ID	2152
mRNA Refseq	NM_001178096
Protein Refseq	NP_001171567
MIM	134390
UniProt ID	P13726

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