

Recombinant Rat F3, His-tagged

Cat. No. F3-29R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the rat F3(Q66HI4)(Met1-Glu252) was expressed, fused with a polyhistidine tag at the C-terminus.
Species	Rat
Source	Human Cells
ProteinLength	1-252 a.a.
Description	Tissue factor, 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. Because of its essential role in hemostasis, Tissue factor plays a role in pathology associated with hemostasis, triggering the coagulation system in many thrombotic diseases and the coagulopathies associated with sepsis and other forms of disseminated intravascular coagulation. 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

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macrophages, and peripheral blood monocytes.

Predicted N Terminal Ala 29

Form Lyophilized from sterile PBS, pH7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA.

Molecular Mass The recombinant rat F3 comprises 235 amino acids and predicts a molecular mass of 27.2 kDa. The apparent molecular mass of the recombinant protein is approximately 47-52 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Endotoxin < 1.0 eu per µg of the protein as determined by the lal

Purity >95 % as determined by SDS-PAGE

Stability Samples are stable for up to twelve months from date of receipt at -70°C

Storage Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name F3 coagulation factor III (thromboplastin, tissue factor) [*Rattus norvegicus*]

Official Symbol F3

Synonyms F3; coagulation factor III (thromboplastin, tissue factor); tissue factor; TF; coagulation factor 3; MGC93621;

Gene ID 25584

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mRNA Refseq	NM_013057
Protein Refseq	NP_037189
Pathway	Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem; Complement and coagulation cascades, conserved biosystem; Extrinsic Pathway, organism-specific biosystem; Formation of Fibrin Clot (Clotting Cascade), organism-specific biosystem; Hemostasis, organism-specific biosystem;
Function	cell surface binding; cell surface binding; phospholipid binding; phospholipid binding; protease binding; protease binding; protease binding;

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