

Coagulation Factor VII (F7) Active Protein | F7 active protein

Active Coagulation Factor VII (F7)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA148198	E Coli	Rat	Activity Assay, Cell Culture

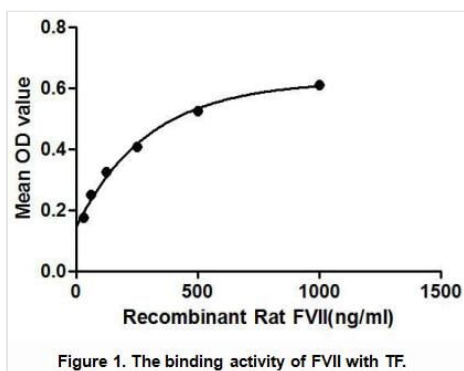
PRODUCT SYNONYMS

Coagulation Factor VII (F7); Active Coagulation Factor VII (F7); FVII; SPCA; proconvertin; Cothromboplastin; Serum Prothrombin Conversation Accelerator; Stable Factor; Eptacog alfa; F7 active protein

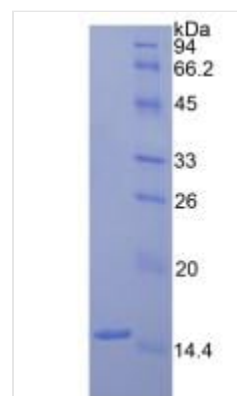
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Rat
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	446
Applicable Applications for F7 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Ala315~Asp433
Isoelectric Point	6.4

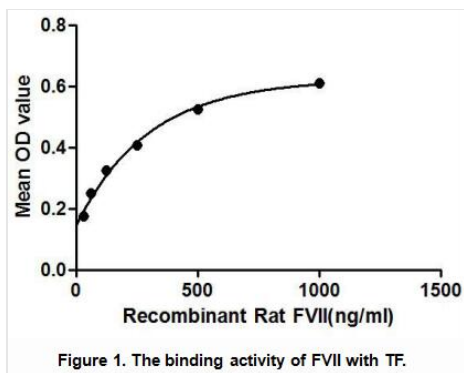
IMAGES



Application Data



SDS-PAGE



Activity

The main role of factor VII (FVII) is to initiate the process of coagulation in conjunction with tissue factor (TF). Tissue factor is found on the outside of blood vessels-normally not exposed to the bloodstream. Upon vessel injury, tissue factor is exposed to the blood and circulating FVII. Once bound to TF, FVII is activated to FVIIa by different proteases, among which are thrombin (factor IIa), factor Xa, IXa, XIIa, and the FVIIa-TF complex itself. Tissue Factor (TF) has been identified as an interactor of FVII, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat FVII and recombinant rat TF. Briefly, FVII were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TF-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-FVII pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of FVII and TF was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for F7 active protein	Metabolic pathway; Infection immunity; Hematology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	25742855
NCBI GeneID	260320
NCBI Accession #	NP_690059.1
NCBI GenBank Nucleotide #	NM_152846.1
UniProt Accession #	Q8K3U6
Molecular Weight	Predicted Molecular Weight: 14.4kDa Accurate Molecular Weight: 14kDa
NCBI Official Full Name	coagulation factor VII
NCBI Official Synonym Full Names	coagulation factor VII
NCBI Official Symbol	F7
NCBI Protein Information	coagulation factor VII
UniProt Protein Name	Coagulation factor VII
UniProt Gene Name	F7

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.