

Rat Factor VII protein, His tag

Cat. No. GTX00352-pro

Applications Functional Assay

Species Rat

Package

10 µg

Applications

Application Note

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 100 µl were then transferred to TF-coated microtiter wells and incubated for 2h at 37°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°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of FVII and TF was in a dose dependent manner.

Observed MW (kDa) 14 kDa.

Properties

Form Lyophilized powder

Buffer Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

Preservative ProClin 300

Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

Region/Sequence N-terminal His-Tag; Ala315~Asp433 (NP_690059.1)

Expression System E. coli

Purity > 95%

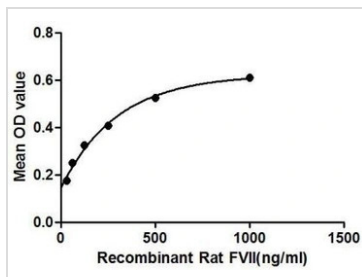
Endotoxin < 1 EU/µg

Conjugation Unconjugated

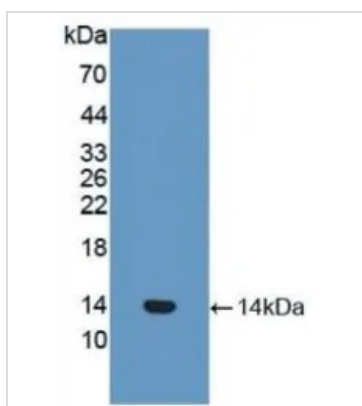
Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



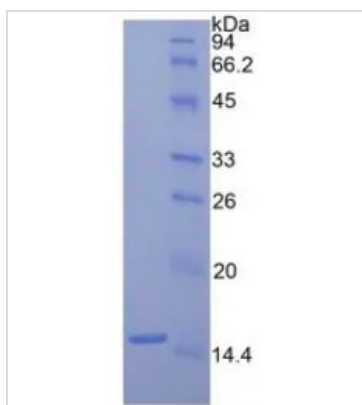
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DATA IMAGES

GTX00352-pro Functional Assay Image

Functional ELISA analysis of GTX00352-pro Rat Factor VII protein which can bind immobilized TF protein.


GTX00352-pro Image

WB analysis of GTX00352-pro Rat Factor VII protein.


GTX00352-pro Image

SDS-PAGE analysis of GTX00352-pro Rat Factor VII protein.



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