

Coagulation Factor IX (F9) Active Protein | F9 active protein

Active Coagulation Factor IX (F9)

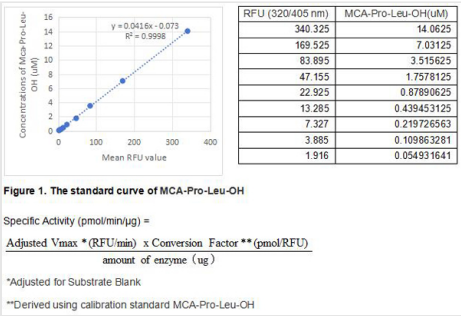
CATALOG # AAA161786	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Coagulation Factor IX (F9); Active Coagulation Factor IX (F9); Coagulation Factor IX; HEMB; FIX; GLA Domain; PTC; Anti Hemophilic Factor B; Christmas Factor; Plasma Thromboplastic Component; Christmas Disease; Hemophilia B4; F9 active protein

PRODUCT SPECIFICATIONS

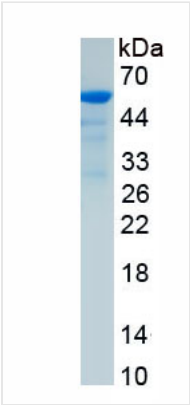
Host	E Coli
Purity/Purification	Greater than 80% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Thr46 2
Applicable Applications for F9 active protein	Activity Assay, Cell Culture
Species	Rabbit
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.4
Research Area	Signal transduction, Hematology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Coagulation Factor IX, also known as Christmas Factor, is a secreted by the liver and plays a key role in the activation of the intrinsic clotting cascade. Factor IX consists of a Gla domain, two tandem EGF-like domains, an activation peptide, and an S1 serine protease domain. Mature human Factor IX shares approximately 81% amino acid sequence identity with mouse and rat Factor IX. Alternative splicing generates an additional isoform that lacks the first EGF-like domain. The activity of recombinant rabbit Coagulation Factor IX is measured by its ability to cleave a fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH2 in the assay buffer 100 mM Tris, 150 mM NaCl, 10 mM CaCl2, 0.05% (w/v) Brij-35, pH 8.0. The Coagulation Factor IX is diluted to 100 ug/ml in assay buffer, then activated with a final concentration of 10 ug/ml Thermolysin at 37 degree C for 90min. Adding a final concentration of 10 mM 1,10 Phenanthroline to stop the activation. The activated Coagulation Factor IX is diluted to 6 ug/mL in assay buffer. Loading into a black well plate 50 uL of 6 ug/mL Coagulation Factor IX and start the reaction by adding 50 uL of 20 uM substrate, with a substrate blank containing 50 uL assay buffer, 50 uL substrate, and no Coagulation Factor IX. Then read at 320/405 nm in kinetic mode for 5 minutes. The specific activity of recombinant rabbit Coagulation Factor IX is > 20 pmol/min/ug.

SDS-PAGE
Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for F9 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	307611996
NCBI GeneID	100009113
NCBI Accession #	NP_001182654.1
NCBI GenBank Nucleotide #	NM_001195725.1
UniProt Accession #	G1U9U2; P16292
Molecular Weight	48.7kDa
NCBI Official Full Name	coagulation factor IX
NCBI Official Symbol	F9
NCBI Protein Information	coagulation factor IX; christmas factor
UniProt Protein Name	Coagulation factor IX
UniProt Gene Name	F9
UniProt Entry Name	G1U9U2_RABIT

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.