abcam

Product datasheet

Native Cow Factor IX/PTC protein ab62459

Description

Product name Native Cow Factor IX/PTC protein

Purity > 95 % Ion Exchange Chromatography.

Purity is assessed by SDS-PAGE analysis.

Expression system Native

Protein length Full length protein

Animal free No

Nature Native

Species Cow

Additional sequence information prepared from highly purified factor IX by activation with factor XIa, as described by Lindquist et

al.

Specifications

Our Abpromise quarantee covers the use of ab62459 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Functional Studies

Form Liquid

Additional notes Concentration varies from lot to lot but is between 5-10mg/ml

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Constituent: 50% Glycerol

General Info

Function Factor IX is a vitamin K-dependent plasma protein that participates in the intrinsic pathway of

blood coagulation by converting factor X to its active form in the presence of Ca(2+) ions,

phospholipids, and factor VIIIa.

Tissue specificity Synthesized primarily in the liver and secreted in plasma.

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Involvement in disease Defects in F9 are the cause of recessive X-linked hemophilia B (HEMB) [MIM:306900]; also

known as Christmas disease.

Note=Mutations in position 43 (Oxford-3, San Dimas) and 46 (Cambridge) prevents cleavage of the propeptide, mutation in position 93 (Alabama) probably fails to bind to cell membranes, mutation in position 191 (Chapel-Hill) or in position 226 (Nagoya OR Hilo) prevent cleavage of the

activation peptide.

Defects in F9 are the cause of thrombophilia due to factor IX defect (THR-FIX) [MIM:300807]. A

hemostatic disorder characterized by a tendency to thrombosis.

Sequence similarities Belongs to the peptidase S1 family.

Contains 2 EGF-like domains.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 1 peptidase S1 domain.

DomainCalcium binds to the gamma-carboxyglutamic acid (Gla) residues and, with stronger affinity, to

another site, beyond the Gla domain.

Post-translational Activated by factor Xla, which excises the activation peptide.

modifications

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

stereospecific within EGF domains.

Cellular localization Secreted.

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