ARG70845
Human Factor IX recombinant protein (His-tagged, C-ter)

Package: 20 µg
Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Factor IX recombinant protein
Tested Application	SDS-PAGE
Target Name	Factor IX
Species	Human
A.A. Sequence	Lys51 - Pro120
Expression System	E. coli
Alternate Names	Coagulation factor IX; HEMB; FIX; PTC; Plasma thromboplastin component; F9 p22; THPH8; EC 3.4.21.22; P19; Christmas factor

Properties

Form	Powder
Buffer	PBS
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration approximately 1 mg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C, protected from light and moisture, for up to 12 months. After reconstitution , aliquot and store at 2 to 8°C for up to 2 days, or at -20°C or -80°C for up to 3 months Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.

Bioinformation

Gene Symbol	F9
Gene Full Name	coagulation factor IX
Background	This gene encodes vitamin K-dependent coagulation factor IX that circulates in the blood as an inactive zymogen. This factor is converted to an active form by factor XIa, which excises the activation peptide and thus generates a heavy chain and a light chain held together by one or more disulfide bonds. The role of this activated factor IX in the blood coagulation cascade is to activate factor X to its active form through interactions with Ca+2 ions, membrane phospholipids, and factor VIII. Alterations of this gene, including point mutations, insertions and deletions, cause factor IX deficiency, which is a recessive X-linked disorder, also called hemophilia B or Christmas disease. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Sep 2015]
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. [UniProt]
PTM	Activated by factor XIa, which excises the activation peptide (PubMed:9169594, PubMed:1730085). The propeptide can also be removed by snake venom protease (PubMed:20004170, PubMed:20080729). The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

	stereospecific within EGF domains. Predominantly O-glucosylated at Ser-99 by POGLUT1 in vitro. Xylosylation at this site is minor. [UniProt]
Cellular Localization	Secreted. [UniProt]