

## Active Recombinant Human F9 Protein, His-tagged

Cat. No. F9-013H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Active recombinant human C-terminal His-tagged coagulation factor IX (29-461) was expressed in HEK293 cells.

**Species** Human

**Source** HEK293

**ProteinLength** 29-461

**Description** 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<sup>2+</sup> 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.

**Form** Lyophilized

**Bio-activity** Measured by its ability to cleave the peptide substrate Z-D-Arg-Gly-Arg-pNA. The specific activity is > 20 pmols/min/ µg.

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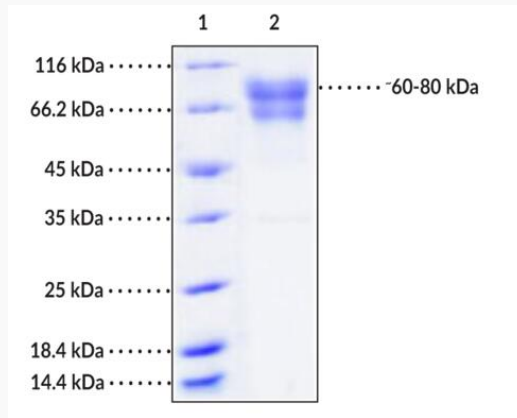
|                         |  |
|-------------------------|--|
| <b>Molecular Mass</b>   | 50 kDa   |
| <b>Endotoxin</b>        | <1.0 EU/ µg, determined by the LAL endotoxin assay.  |
| <b>Purity</b>           | ≥95% as determined by SDS-PAGE   |
| <b>Stability</b>        | ≥ 2 years  |
| <b>Storage</b>          | At -80 centigrade.   |
| <b>Storage Buffer</b>   | Sterile PBS, pH 7.4  |
| <b>GENE INFORMATION</b> |  |
| <b>Gene Name</b>        | F9 coagulation factor IX [ Homo sapiens (human) ]  |
| <b>Official Symbol</b>  | F9   |
| <b>Synonyms</b>         | F9; coagulation factor IX; FIX; P19; PTC; HEMB; THPH8; F9 p22; coagulation factor IX; Christmas factor; factor 9; factor IX F9; plasma thromboplastic component; plasma thromboplastin component; EC 3.4.21.22 |
| <b>Gene ID</b>          | 2158   |
| <b>mRNA Refseq</b>      | NM_000133  |
| <b>Protein Refseq</b>   | NP_000124  |
| <b>MIM</b>              | 300746   |
| <b>UniProt ID</b>       | P00740   |

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**SDS-PAGE analysis  
of Coagulation  
Factor IX**



Lane 1: MW Markers

Lane 2: Coagulation Factor IX

This protein has a calculated molecular weight of 50 kDa. It has an apparent molecular weight of approximately 60-80 kDa by SDS-PAGE under reducing conditions due to glycosylation.

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