# Coagulation factor IX/F9 Protein, Human (HEK293, His)

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| **Cat. No.:** | HY-P70231 |
| **Synonyms:** | rHuCoagulation factor IX/F9, His; F9; Coagulation factor IX; Christmas factor; Plasma thromboplastin component; Coagulation factor IXa light chain; Coagulation factor IXa heavy chain |
| **Species:** | Human |
| **Source:** | HEK293 |
| **Accession:** | P00740 (T29-T461) |
| **Gene ID:** | 2158 |
| **Molecular Weight:** | 60-90 kDa |

## PROPERTIES

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| **AA Sequence** | T V F L D H E N A N K I L N R P K R Y N S G K L E E F V Q G N L E R E C M E E K<br>C S F E E A R E V F E N T E R T T E F W K Q Y V D G D Q C E S N P C L N G G S C<br>K D D I N S Y E C W C P F G F E G K N C E L D V T C N I K N G R C E Q F C K N S<br>A D N K V V C S C T E G Y R L A E N Q K S C E P A V P F P C G R V S V S Q T S K<br>L T R A E T V F P D V D Y V N S T E A E T I L D N I T Q S T Q S F N D F T R V V<br>G G E D A K P G Q F P W Q V V L N G K V D A F C G G S I V N E K W I V T A A H C<br>V E T G V K I T V V A G E H N I E E T E H T E Q K R N V I R I I P H H N Y N A A<br>I N K Y N H D I A L L E L D E P L V L N S Y V T P I C I A D K E Y T N I F L K F<br>G S G Y V S G W G R V F H K G R S A L V L Q Y L R V P L V D R A T C L R S T K F<br>T I Y N N M F C A G F H E G G R D S C Q G D S G G P H V T E V E G T S F L T G I<br>I S W G E E C A M K G K Y G I Y T K V S R Y V N W I K E K T K L T |
| **Biological Activity** | 1. Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2. Read at excitation and emission wavelengths of 320 nm and 405 nm (top read).The specific activity is >200 pmol/min/μg, as measured under the described conditions.<br>2. Measured by its ability to cleave the peptide substrate Z-D-Arg-Gly-Arg-pNA and the specific activity is >20 pmol/min/ug. (Activate human Coagulation factor IX wih Thermolysin in Assay Buffer, 37℃, 90 min.) |
| **Appearance** | Solution. |
| **Formulation** | Supplied as a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, 10% Glycerol, pH 8.0 or PBS, pH 7.4. |
| **Endotoxin Level** | <1 EU/μg, determined by LAL method. |
| **Reconsititution** | N/A |
| **Storage & Stability** | Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | Shipping with dry ice. |

## DESCRIPTION

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| **Background** | Coagulation factor IX, also known as F9, is a vitamin K-dependent plasma protein crucial for blood coagulation, particularly in the intrinsic pathway. This protein plays a pivotal role in converting factor X to its active form in the presence of Ca(2+) ions, phospholipids, and factor VIIIa. As a key component of the coagulation cascade, factor IX contributes to the formation of a stable blood clot, preventing excessive bleeding. The described mechanism highlights the intricate interplay of factor IX with other coagulation factors and cofactors, underscoring its essential role in maintaining hemostasis. |



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