



# Recombinant Dog Coagulation factor IX (F9)

<b>Product Code</b>	CSB-YP007936DO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P19540
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Canis lupus familiaris (Dog) (Canis familiaris)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>Y NSGKLEEFVR GNLERECIEE KCSFEEAREV FENTEKTTEF            WKQYVDGDQC ESNPCLNDGV CKDDINSYEC WCRAFEGKN            CELDVTCNIK NGRCKQFCKL GPDNKVVCSC TTGYQLAEDQ RSCEPAVPFP            CGRVSVPHIS MTRTRAETLF SNMDYENSTE VEKILDNVTQ PLNDFTRVVG            GKDAKPGQFP WQVLLNGKVD AFCGGSIIINE KWVVTAHCI EPDVKITIVA            GEHNTEKREH TEQKRVNVRT ILHHSYNATI NKYNHDIALL ELDEPLTLNS            YVTPICIADR EYSNIFLKFG SGYVSGWGRV FNKGRSASIL QYLKVPLVDR            ATCLRSTKFT IYNNMFCAGF HEGGKDSCQG DSGGPHVTEV EGISFLTGII            SWGEECAMKG KYGIYTKVSR YVNWIKEKTK LT</p>
<b>Source</b>	Yeast
<b>Target Names</b>	F9
<b>Protein Names</b>	Recommended name: Coagulation factor IX EC= 3.4.21.22 Alternative name(s): Christmas factor Cleaved into the following 2 chains: 1. Coagulation factor IXa light chain 2. Coagulation factor IXa heavy chain
<b>Expression Region</b>	40-452
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.



## **Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.