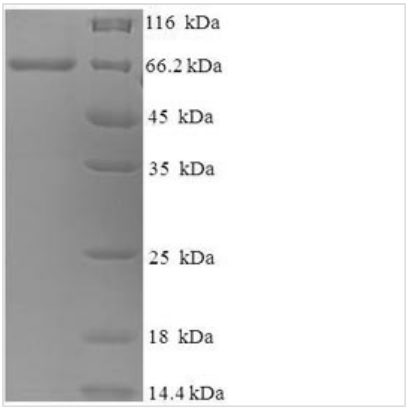
Recombinant Canine distemper virus Fusion glycoprotein F0 (F), partial

Product Code	CSB-EP318261CCQ
Relevance	Class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and plasma cell mbrane fusion, the heptad repeat (HR) regions assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and plasma cell mbranes. Directs fusion of viral and cellular mbranes leading to delivery of the nucleocapsid into the cytoplasm. This fusion is pH independent and occurs directly at the outer cell mbrane. The trimer of F1-F2 (F protein) probably interacts with H at the virion surface. Upon HN binding to its cellular receptor, the hydrophobic fusion peptide is unmasked and interacts with the cellular mbrane, inducing the fusion between cell and virion mbranes. Later in infection, F proteins expressed at the plasma mbrane of infected cells could mediate fusion with adjacent cells to form syncytia, a cytopathic effect that could lead to tissue necrosis .
Storage	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.
Uniprot No.	P12569
Product Type	Recombinant Protein
Immunogen Species	Canine distemper virus (strain Onderstepoort) (CDV)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QIHWDNLSTIGIIGTDNVHYKIMTRPSHQYLVIKLIPNASLIENCTKAELGEYEKLL NSVLEPINQALTLMTKNVKPLQSLGSGRRQRRFAGVVLAGVALGVATAAQITA GIALHQSNLNAQAIQSLRTSLEQSNKAIEEIREATQETVIAVQGVQDYVNNELVP AMQHMSCELVGQRLGLRLLRYYTELLSIFGPSLRDPISAEISIQALIYALGGEIHK ILEKLGYSGSDMIAILESRGIKTKITHVDLPGKFIILSISYPTLSEVKGVIVHRLEAV SYNIGSQEWYTTVPRYIATNGYLISNFDESSCVFVSESAICSQNSLYPMSPLLQ QCIRGDTSSCARTLVSGTMGNKFILSKGNIVANCASILCKCYSTSTIINQSPDKL LTFIASDTCPLVEIDGATIQVGGRQYPDMVYEGKVALGPAISLDRLDVGTNLGN ALKKLDDAKVLIDSSNQILETVRRSSFNFGS
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	F
Expression Region	136-608aa

Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	67.5kDa
Protein Description	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

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.