

Recombinant Canine distemper virus (strain Onderstepoort) (CDV) Fusion glycoprotein F0(F)

Catalog No: #AP70983

Package Size: #AP70983-1 20ug #AP70983-2 100ug #AP70983-3 1mg



Description

Product Name	Recombinant Canine distemper virus (strain Onderstepoort) (CDV) Fusion glycoprotein F0(F)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:136-608aaSequence Info:Full Length
Accession No.	P12569
Calculated MW	67.5 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	QIHWDNLSTIGITDENVHYKIMTRPSHQYLVIKLIPNASLIENCTKAELGEYEKLLNSVLEPINQALTLMTKNVKP LQSLGSGRRQRRFAGVVLAGVALGVATAAQITAGIALHQSNLNAQAIQSLRTSLEQSNKAIEEIREATQETVIAV QGVQDYVNNELVPAMQHMSCELVGQRLGLRLLRYYTELLSIFGPSLRDPISAEISIQALIYALGGEIHKILEKLG SGSDMIAILESRIKTKITHVDLPKGFIILSISYPTLSEVKGVIVHRLEAVSYNIGSQEWYTTVPRIATNGYLISNF DESSCVFVSESAICSQNSLYPMSPLLQQCIRGDTSSCARTLVSGTMGNKFILSKGNIVANCASILCKCYSTII NQSPDKLLTFIASDTCPLVEIDGATIQVGGRQYPDMVYEGKVALGPAISLDRLDVGTNLGNALKKLDDAKVLIDS SNQILETVRRSSFNFGS
Formulation	Tris-based buffer50% glycerol
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.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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 .

References

Amino-terminal precursor sequence modulates canine distemper virus fusion protein function.von Messling V., Cattaneo R.J. Virol. 76:4172-4180(2002) Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.