

Recombinant Clostridium perfringens Perfringolysin O (pfo)

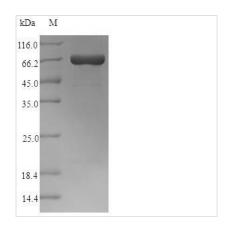
Product Code CSB-EP314820CMB Relevance Sulfhydryl-activated toxin that causes cytolysis by forming pores in cholesterol containing host membranes. After binding to target membranes, the protein assembles into a pre-pore complex. A conformation change leads to insertion in the host membrane and formation of an oligomeric pore complex. Cholesterol may be required for binding to host cell membranes, membrane insertion and pore formation. Can be reversibly inactivated by oxidation. Abbreviation Recombinant Clostridium perfringens Perfringolysin O protein 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. POC2E9 Alias Theta-toxin Thiol-activated cytolysin Product Type Recombinant Protein Immunogen Species Clostridium perfringens (strain 13 / Type A) Purity Greater than 90% as determined by SDS-PAGE. Sequence KDITDKNQSIDSGISSLSYNRNEVLASNGDKIESFVPKEGKKTGNKFIVVERQK GENSIKVDDPTYGKVSGAIDELVSKWNEKYSSTHTLPARTQYSESMVYSKSQI SSALNVNAKVLENSLGVDFNAVANNEKKYMILAYKQIFYTVSADLPKNPSDLF DSVTFNDLKAKGKGYNKEAPPENTMYVAYKGTFVLETTSSSKDVQAAPKALIKN TDIKNSQQYKDIYENSSFTAVVLGGDAQEHNKVVTKDFDEIRKVIKDNAFTSTK NPAYPISYTSVFLKDNSVAAVHNKTDYIETTSTEVSKKKINLDHSGAYVAAFEV AWDEVSYSVEGENEVLTHKTVDGDNYQDKTAHYSTVIPLEANARNIRIKARECTG LAWEWWRDVISEYDVPLTNNINVSIWGTTLYPGSSITYN Research Area		
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	Notes	
Mol. Weight 68.7kDa	Tag Info	N-terminal 6xHis-SUMO-tagged
	Mol. Weight	68.7kDa



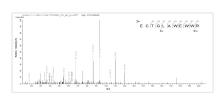
Protein Length

Image

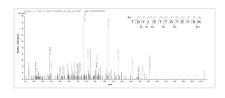
Full Length of Mature Protein



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP314820CMB could indicate that this peptide derived from E.coli-expressed Clostridium perfringens (strain 13 / Type A) pfo.



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Description

The E.coli-expressed recombinant Clostridium perfringens (strain 13/Type A) Perfringolysin O (pfo) verified by the LC-MS/MS Analysis is a full-length of mature protein with an N-terminal 6xHis-SUMO-tag. This in-stock recombinant protein harboring 29-500aa of Clostridium perfringens pfo has a high purity (>90%) measured by SDS-PAGE. Its calculated molecular mass is about 68.7 kDa. This pfo protein may be used in the research field of microbiology due to its origin.

Perfringolysin O (pfo), also called θ toxin, is a pore-forming toxin produced by an anaerobic, spore-forming Gram-positive bacterium Clostridium perfringens. Conformational alterations that influence oligomerization and initiate pore formation are triggered throughout pfo upon binding to cholesterol. Together with α toxin, pfo is implicated in the development of gas ganhrene and necrohemorrhagic enterities in calves.

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.

Shelf Life

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



CUSABIO TECHNOLOGY LLC





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