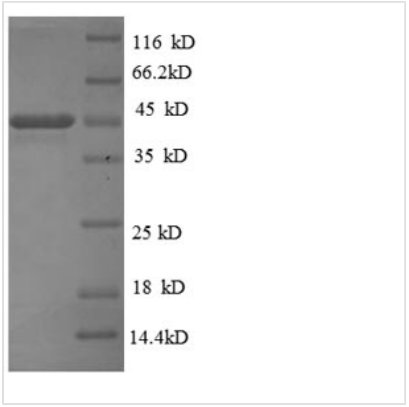
Recombinant Bordetella pertussis Pertactin autotransporter (prn), partial

Product Code	CSB-EP321224BUA
Relevance	Agglutinogen that binds to eukaryotic cells; a process mediated by the R-G-D sequence. Pertactin may have a role in bacterial adhesion, and thus play a role in virulence. May contribute to the disease state of whooping cough.
Abbreviation	Recombinant Bordetella pertussis Pertactin autotransporter protein, partial
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.	P14283
Alias	P.93
Product Type	Recombinant Protein
Immunogen Species	Bordetella pertussis (strain Tohama I / ATCC BAA-589 / NCTC 13251)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ALSKRLGELRLNPDAGGAWGRGFAQRQQLDNRAGRRFDQKVAGFELGADHA VAVAGGRWHLGGLAGYTRGDRGFTGDGGGHTDSVHVGGYATYIADSGFYLD ATLRASRLENDFKVAGSDGYAVKGKYRTHGVGASLEAGRRFTHADGWFLEP QAELAVFRAGGGAYRAANGLRVRDEGGSSVLGRLGLEVGKRIELAGGRQVQ PYIKASVLQEFDGAGTVHTNGIAHRTELRGTRAELGLGMAAALGRGHSLYASY EYSKGPKLAMPWTFHAGYRYSW
Research Area	Others
Source	E.coli
Target Names	prn
Expression Region	632-910aa
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	45.8kDa
Protein Length	Partial
Image	



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

Description

Amino acids 632-910 constitute the expression domain of recombinant Bordetella pertussis prn. The calculated molecular weight for this prn protein is 45.8 kDa. The prn protein was expressed in e.coli. The N-terminal 6xHis-SUMO tag was smoothly integrated into the coding gene of prn, which enables a simple process of detecting and purifying the prn recombinant protein in the following steps.

The pertactin (Prn) is an autotransporter that plays a crucial role in the adhesion of B. pertussis to respiratory epithelial cells and contributes to the bacterium's ability to colonize the respiratory tract. Prn is synthesized as a single polypeptide chain and then transported across the bacterial outer membrane to the cell surface. Once on the bacterial surface, Prn functions as an adhesin, facilitating the attachment of B. pertussis to host cells. In addition to its role in adhesion, Prn is one of the antigens included in some acellular pertussis vaccines. Understanding the function and variability of the Prn autotransporter is crucial for developing effective pertussis vaccines and gaining insights into the pathogenic mechanisms of Bordetella pertussis.

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

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