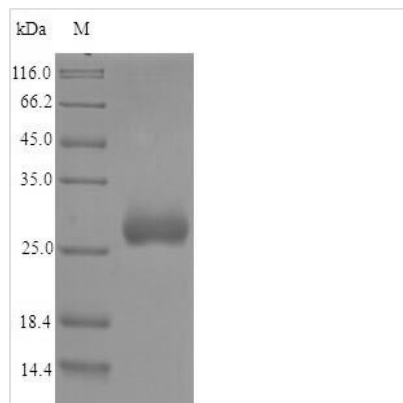




Recombinant Chlamydia trachomatis Small cysteine-rich outer membrane protein OmcA (OmcA)

Product Code	CSB-EP316432DSB
Relevance	In elementary bodies (EBs, the infectious stage, which is able to survive outside the host cell) provides the structural integrity of the outer envelope through disulfide cross-links with the large cysteine-rich periplasmic protein and the major outer membrane porin. It has been described in publications as the Sarkosyl-insoluble COMC (Chlamydia outer membrane complex), and serves as the functional equivalent of peptidoglycan (By similarity).
Abbreviation	Recombinant Chlamydia trachomatis omcA 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.	P0CC05
Alias	9 kDa cysteine-rich lipoprotein Short name:9kDa-CRP
Product Type	Recombinant Protein
Immunogen Species	Chlamydia trachomatis (strain D/UW-3/Cx)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	CCRIVDCCFEDPCAPIQCSPCESKKKDVDGGCNSCNGYVPACKPCGGDTHQ DAKHGPQARGIPVDGKCRQ
Research Area	Microbiology
Source	E.coli
Target Names	omcA
Protein Names	Recommended name: Small cysteine-rich outer membrane protein omcA Short name= Small-CRP Alternative name(s): 9 kDa cysteine-rich lipoprotein Short name= 9kDa-CRP
Expression Region	19-88aa
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	23.4kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

The expression region of this recombinant *Chlamydia trachomatis* (strain D/UW-3/Cx) *omcA* covers amino acids 19-88. This *omcA* protein is expected to have a theoretical molecular weight of 23.4 kDa. This protein is generated in a *e.coli*-based system. The N-terminal 6xHis-SUMO tag was smoothly integrated into the coding gene of *omcA*, which enables a simple process of detecting and purifying the *omcA* recombinant protein in the following steps.

The small cysteine-rich outer membrane protein *OmcA* is a component of the outer membrane of *Chlamydia trachomatis*, an obligate intracellular bacterium that causes various human diseases, including sexually transmitted infections and trachoma. *OmcA* is characterized by its small size and the presence of cysteine residues in its structure. The outer membrane proteins of *Chlamydia* play important roles in interactions with host cells and the immune system, contributing to the pathogenesis of chlamydial infections. *OmcA*, like other outer membrane proteins, is a potential target for understanding the host-pathogen interactions and developing strategies for intervention or vaccination.

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.

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