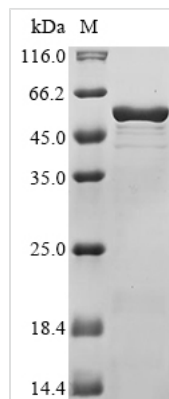




Recombinant Yersinia pestis Virulence-associated V antigen (IcrV)

Product Code	CSB-EP315209YAS
Abbreviation	Recombinant Yersinia pestis IcrV 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.	P0C7U7
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Yersinia pestis
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MIRAYEQNPQHFIEDLEKVRVEQLTGHGSSVLEELVQLVKDKNIDISIKYDPRKD SEVFANRVITDDIELLKILAYFLPEDAILKGGHYDNQLQNGIKRVKEFLESSPNT QWELRAFMAVMHFSLTADRIDDDILKVIVDSMNHGHDARSKLREELAELTAEL KIYSVIAEINKHLSSSGTINIHDKSINLMDKNLYGYTDEEIFKASAEYKILEKMPQ TTIQVDGSEKKIVSIKDFLGSENKRTGALGNLKNSYSYNKDNNELSHFATTCS KSRPLNDLVSQKTTQLSDITSRFNSAIEALNRFIQKYDSVMQRLLDDTSGK
Research Area	Others
Source	E.coli
Target Names	IcrV
Expression Region	1-326AA
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Mol. Weight	53.3 kDa
Protein Length	Full Length
Image	



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

Description

The recombinant *Yersinia pestis* LcrV was expressed with the amino acid range of 1-326. The calculated molecular weight for this LcrV protein is 53.3 kDa. Expression of this LcrV protein is conducted in *e.coli*. The LcrV coding gene included the N-terminal 10xHis-SUMO tag and C-terminal Myc tag, which simplifies the detection and purification processes of the recombinant LcrV protein in following stages of expression and purification.

The *Yersinia pestis* virulence-associated V antigen (LcrV) is a key protein contributing to the pathogenicity of *Yersinia pestis*, the causative agent of plague. LcrV is a component of the type III secretion system (T3SS), a molecular apparatus used by *Y. pestis* to inject effector proteins directly into host cells. LcrV plays a pivotal role in the translocation of these effectors, modulating host immune responses and aiding in the establishment of infection. It is involved in the formation of the injectisome, a needle-like structure through which *Yersinia* delivers virulence factors into host cells. Understanding the function of LcrV is crucial for developing strategies to counteract *Y. pestis* infections and potentially mitigate the impact of plague outbreaks.

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. 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.