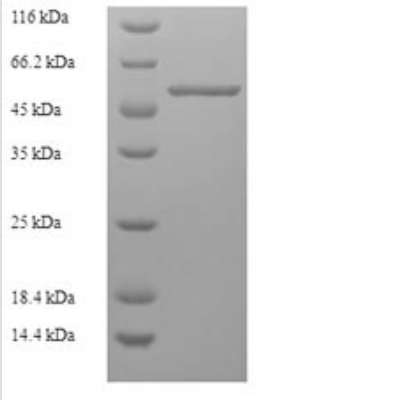
Recombinant Borrelia burgdorferi Flagellar filament 41 kDa core protein (fla)

Product Code	CSB-EP319964BUD
Relevance	Component of the core of the flagella.
Abbreviation	Recombinant Borrelia burgdorferi Flagellar filament 41 kDa core 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.	P11089
Alias	41 kDa antigen;P41
Product Type	Recombinant Protein
Immunogen Species	Borrelia burgdorferi (strain ATCC 35210 / B31 / CIP 102532 / DSM 4680)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MIINHNTSAINASRNNGINAANLSKTQEKLSSGYRINRASDDAAGMGVSGKINA QIRGLSQASRNTSKAINFIQTTEGNLNEVEKVLVRMKELAVQSGNGTYSDADR GSIQIEIEQLTDEINRIADQAQYNQMHMLSNKSASQNVRTAEELGMQPAKINTP ASLSGSQASWTLRVHVGANQDEAIAVNIYAANVANLFSGEGAQTAQAAPVQE GVQQEGAQQPAPATAPSQGGVNSPVNVTTTVDANTSLAKIENAIRMISDQRAN LGAFQNRLESIKDSTEYAIENLKASYAQIKDATMTDEVVAATTNSILTQSAMAMI AQANQVPQYVLSLLR
Research Area	Others
Source	E.coli
Target Names	fla
Expression Region	1-336aa
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	51.8kDa
Protein Length	Full Length
Image	



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

Description

Amino acids 1-336 constitute the expression domain of recombinant Borrelia burgdorferi fla. This fla protein is theoretically predicted to have a molecular weight of 51.8 kDa. This fla protein is produced using e.coli expression system. The N-terminal 6xHis-SUMO tag was smoothly integrated into the coding gene of fla, which enables a simple process of detecting and purifying the fla recombinant protein in the following steps.

The Borrelia burgdorferi Flagellar Filament 41 kDa Core Protein (Fla) is a structural component of the bacterial flagellum, a whip-like appendage that plays a crucial role in motility and chemotaxis. Borrelia burgdorferi is a spirochete bacterium responsible for causing Lyme disease, and its flagellum is essential for its movement in various environments. The Fla protein forms the core structure of the flagellar filament and is involved in the rotation of the flagellum, allowing the bacterium to navigate and migrate through different host tissues. Research on the Fla protein in Borrelia burgdorferi is crucial for understanding the bacterium's motility, which is essential for its transmission between hosts and the establishment of infection. Investigating the structure and function of Fla may contribute to the development of strategies to interfere with the bacterium's motility, potentially hindering its ability to cause Lyme disease.

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.