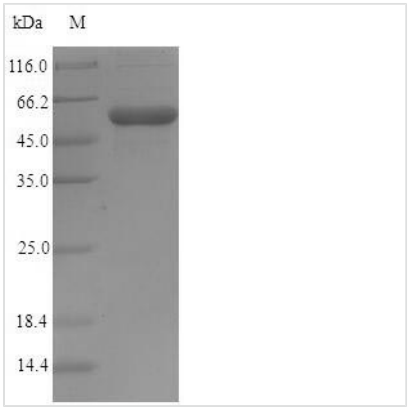
Recombinant Shigella flexneri Invasin IpaD (ipaD)

Product Code	CSB-EP325954SZB
Relevance	Required for bacterial invasion of host cells. Controls IpaB and IpaC secretion, and the efficiency with which they are physically inserted into target cell membranes. These proteins are exported via TTSS to form a pore in the host membrane that allows the translocation of the other effectors into the host cytoplasm. Along with IpaB, is essential for both blocking secretion through the Mxi/Spa translocon in the absence of a secretion-inducing signal, and for controlling the level of secretion in the presence of this signal
Abbreviation	Recombinant Shigella flexneri ipaD 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.	P18013
Alias	36 kDa membrane antigen
Product Type	Recombinant Protein
Immunogen Species	Shigella flexneri
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MNITTLTNSISTSSFSPNNTNGSSTETVNSDIKTTTSSHPVSSLTMLNDTLHNIR TTNQALKKELSQKTLTKTSLEEIALHSSQISMDVNKSAQLLDILSRNEYPINKDA RELLHSAPKEAELDGDQMISHRELWAKIANSINDINEQYLKVYEHAVSSYTQMY QDFSAVLSSLAGWISPGGNDGNSVKLQVNSLKKALEELKEKYKDKPLYPANNT VSQEQANKWLTELGGTIGKVSQKNGGYVVSINMTPIDNMLKSLDNLGGNGEV VLDNAKYQAWNAGFSAEDETMKNNLQTLVQKYSNANSIFDNLVKVLSSTISSC TDTDKLFLHF
Research Area	Microbiology
Source	E.coli
Target Names	ipaD
Protein Names	Recommended name: Invasin ipaDAlternative name(s): 36 kDa membrane antigen
Expression Region	1-332aa
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	56.6kDa
Protein Length	Full Length
Image	



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

Description

Recombinant Shigella flexneri Invasin Ipad with an N-terminal 10xHis-SUMO-tag and a C-terminal Myc-tag is a full-length of protein expressed in E.coli. The sequence used to prepare this recombinant Ipad protein corresponds to residues Met1-Phe332 of Shigella flexneri Ipad. Its purity is greater than 90% determined by SDS-PAGE. A molecular mass band of approximately 50-62 kDa was visualized on the gel under reducing conditions. In-stock Ipad proteins are offered. This recombinant Ipad protein may be used to produce antibodies against Ipad or in the studies of Ipad-related microbiology.

Invasion plasmid antigen D (Ipad) is a structural component that forms a complex at the tip of the Shigella type III secretion system (T3SS) apparatus needle. It is one of the predominant virulence factors of Shigella flexneri. Olivia Arizmendi etc. demonstrated that Ipad triggers apoptosis in macrophages through activation of host caspases accompanied by mitochondrial disruption during Shigella flexneri infection. And the N-terminal domain of the Ipad is necessary for macrophage killing.

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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