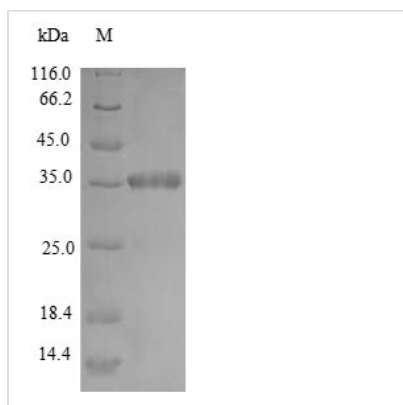


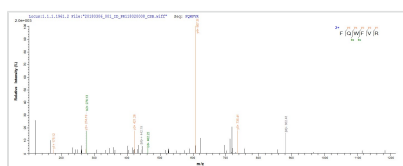


Recombinant Mycobacterium smegmatis DNA protection during starvation protein (dps)

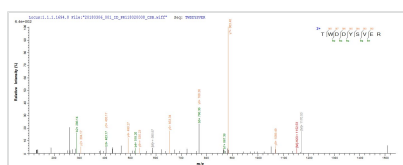
| | |
|--------------------------|---|
| Product Code | CSB-EP314354MVW |
| Relevance | Protects DNA from oxidative damage by sequestering intracellular Fe ²⁺ ion and storing it in the form of Fe ³⁺ oxyhydroxide mineral. One hydrogen peroxide oxidizes two Fe ²⁺ ions, which prevents hydroxyl radical production by the Fenton reaction (By similarity). It protects DNA from hydroxyl radical-mediated cleavage. Binds DNA with no apparent sequence specificity without self-aggregation nor promotion of DNA condensation. Is unable to protect DNA from DNase-mediated cleavage. |
| Abbreviation | Recombinant Mycobacterium smegmatis dps 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. | P0C558 |
| Product Type | Recombinant Protein |
| Immunogen Species | Mycobacterium smegmatis |
| Purity | Greater than 90% as determined by SDS-PAGE. |
| Sequence | MTSFTIPGLSDKKASDVADLLQKQLSTYNDLHLLTKHVVHWNVVGPNFIVHEMI DPQVELVRGYADEVAERIAITLGKSPKGTGPAIHKDRTWDDYSVERDTVQAHLA ALDLVYNGVIEDTRKSIEKLEDLDLVSQDLLIAHAGELEKFQWFVRAHLESAGG QLTHEGQSTEKGAADKARRKSA |
| Research Area | Microbiology |
| Source | E.coli |
| Target Names | dps |
| Protein Names | Recommended name: DNA protection during starvation protein EC= 1.16.-.- |
| Expression Region | 1-183aa |
| 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 | 36.3kDa |
| Protein Length | Full Length |
| Image | |



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP314354MVW could indicate that this peptide derived from E.coli-expressed Mycobacterium smegmatis dps.



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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.