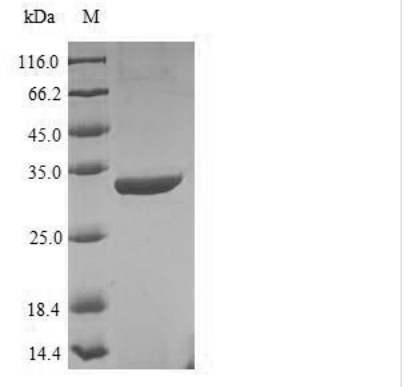
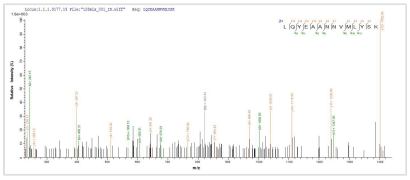
Recombinant Enterobacteria phage T4 Recombination protein uvsY (uvsY)

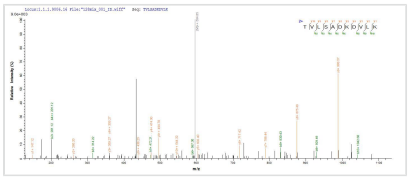
Product Code	CSB-EP366179EDZ
Relevance	Plays a role in viral DNA synthesis by promoting enzymatic activities of UvsX recombinase, by promoting UvsX-ssDNA filament assembly, and by helping UvsX to displace bound gp32 from ssDNA.
Abbreviation	Recombinant Enterobacteria phage T4 uvsY protein
Storage	The 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.	P04537
Product Type	Recombinant Protein
Immunogen Species	Enterobacteria phage T4 (Bacteriophage T4)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MRLEDLQEELKKDVFIDSTKLQYEAANNVMLYSKWLNKHSSIKKEMLRIEAQKK VALKARLDYYSGRGDGDEFSMDRYEKSEMKTVLSADKDVLKVDTSLQYWGIL LDFCSGALDAIKSRGFAIKHIQDMRAFEAGK
Research Area	Others
Source	E.coli
Target Names	uvsY
Expression Region	1-137aa
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	31.8kDa
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-EP366179EDZ could indicate that this peptide derived from E.coli-expressed Enterobacteria phage T4 (Bacteriophage T4) uvsY.



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Description

Intact Enterobacteria phage T4 Recombination protein uvsY (uvsY) cDNA (1-137aa) with an N-terminal 6xHis--SUMO-tag was expressed in the E.coli. The forming protein is the Recombinant full-length Enterobacteria phage T4 uvsY protein. The purity of this protein is greater than 90% as determined by SDS-PAGE. Under reducing conditions, the SDS-PAGE gel showed a molecular weight band of about 33 kDa. And this uvsY protein also underwent the validation by the LC-MS/MS analysis. This uvsY protein is in-stock so that there is no waiting period for product preparation. It may find uses for specific antibody synthesis or in the studies of homologous recombination (HR).

UVSY is the phage T4 recombination mediator protein (RMP) that is crucial for efficient HR in bacteriophage T4 and is the functional analog of the eukaryotic Rad52 protein. HR has important roles in repairing double-stranded DNA (dsDNA) break repair, restarting the stalled replication forks, and recombination-dependent replication. UVSY is specifically recruited to ssDNA–Gp32 complexes and promotes the dissociation of Gp32, thus stimulating the DNA-dependent ATPase activity of recombinase UVSX and facilitating the strand exchange.

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.