



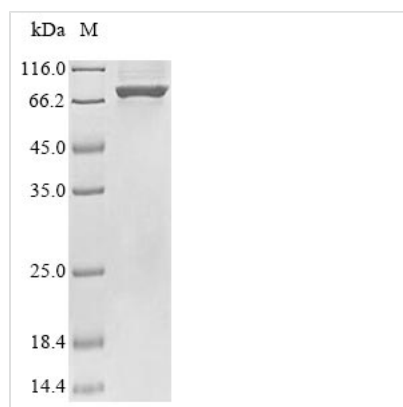
Recombinant Escherichia coli DNA helicase II (uvrD)

Product Code	CSB-EP360936ENV
Relevance	A helicase with DNA-dependent ATPase activity. Unwinds DNA duplexes with 3' to 5' polarity with respect to the bound strand. Initiates unwinding more efficiently from a nicked substrate than ds duplex DNA. Involved in the post-incision events of nucleotide excision repair and methyl-directed mismatch repair, and probably also in repair of alkylated DNA
Abbreviation	Recombinant E.coli uvrD 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.	P03018
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MDVSYLLDSLNDKQREAVAAPRSNLLVLAGAGSGKTRVLVHRIAWLMSVENC SPYSIMAVTFTNKAAAEMRHRIGQLMGTSQGGMWVGTFHGLAHRLLRAHHM DANLPQDFQILDSEDQLRLLKRLIKAMNLDEKQWPPRQAMWYINSQKDEGLR PHHIQSYGNPVEQTWQKVYQAYQEACDRAGLVDFAEALLRAHELWLNKPHIL QHYRERFTNILVDEFQDTNNIQYAWIRLLAGDTGKVMIVGDDDQSIYGWRGAQ VENIQRFLNDFPGAETIRLEQNYRSTSNILSAANALIENNNGRLGKKLWTDGAD GEPISLYCAFNELDEARFVVNRIKTWQDNGGALAECAILYRSNAQSRVLEEALL QASMPYRIYGGMRFFERQEIKDALSYLRLIANRNDDAAFERVVNTPTRGIGDR TLDVVRQTSRDRQLTLWQACRELLQEALAGRAASALQRFMELIDALAQETAD MPLHVQTDRVIKDSGLRTMYEQEKGEKGQTRIVENLEELVTATRQFSYNEEDED LMPLQAFLSHAALEAGEGQADTWQDAVQLMTLHSAKGLEFPQVFIVGMEEGM FPSQMSLDEGGRLLEEERLAYVGVTRAMQKLTLYAETRRLYGKEVYHRPSR FIGELPEECVVEEVRLRATVSRPVSHQRMGTPMVENDSGYKLGQVRVHAKFGE GTIVNMEGSGEHSRLQVAFQGGQIKWLVAAYARLESV
Research Area	Others
Source	E.coli
Target Names	uvrD
Protein Names	mutU, pdeB, rad, recL
Expression Region	1-720aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag-Free

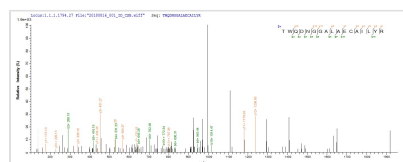
Mol. Weight 82.0 kDa

Protein Length Full Length

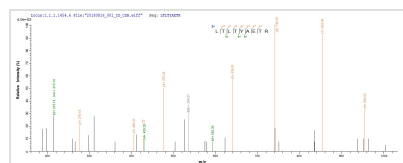
Image



(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-EP360936ENV could indicate that this peptide derived from E.coli-expressed Escherichia coli (strain K12) uvrD.



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Description

The gene fragment corresponding to the 1-720aa of the E.coli uvrD protein was cloned into an expression vector. The expression vector was transformed into the E.coli for expression. The generated product was purified and separated to obtain the recombinant E.coli uvrD protein. Its purity is higher than 85% measured by SDS-PAGE. This recombinant uvrD protein showed an apparent molecular weight of about 90 kDa under SDS-PAGE condition.

uvrD is a gene encoding a protein named DNA helicase II and belongs helicase family and UvrD subfamily. Helicases are a class of enzymes thought to be vital to all organisms. Their main function is to unpack an organism's genes. uvrD is a helicase with DNA-dependent ATPase activity and has a critical role in the processing of DNA-protein cross-links. It is involved in the post-incision events of nucleotide excision repair and methyl-directed mismatch repair, and probably also in repair of alkylated DNA.

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,



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