

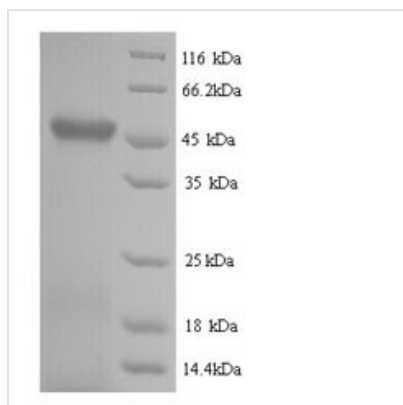


Recombinant Escherichia coli RNA-splicing ligase RtcB (rtcB)

Product Code	CSB-YP341647ENV
Relevance	RNA ligase that mediates the joining of broken tRNA-like st-loop structures in case of tRNA damage. Probably participates to tRNA restriction-repair by ligating broken tRNA-like st-loop structures with 2',3'-cyclic phosphate and 5'-OH ends to form a splice junction with a 2'-OH, 3',5'-phosphodiester, a step that requires GTP . Also acts as a DNA ligase in case of DNA damage by splicing 'dirty' DNA breaks, characterized by 3'-PO ₄ (or cyclic-PO ₄) and 5'-OH ends that cannot be sealed by classical DNA ligases .
Abbreviation	Recombinant E.coli rtcB 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.	P46850
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	MNYELLTTENAPVKMWTKGVPVEADARQQLINTAKMPFIFKHIAVMPDVHLGK GSTIGSVIPTKGAIIPAAVGVDIGCGMNALRTALTAEDLPENLAELRQAIETAVPH GRTTGRCKRDKGAWENPPVNVDKAWAELEAGYQWLTQKYPRFLNTNNYKHL GTLGTGNHFIEICLDESDQVWIMLHSGSRGIGNAIGTYFIDLAQKEMQETLETLP SRDLAYFMEGTEYFDDYLKAWAWAQLFASLNRDAMMENVVTALQSITQKTVR QPQTLAMEEINCHHNYVQKEQHFGEIYVTRKGAVSARAGQYGIIPGSMGAKS FIVRGLGNEESFCSCSHGAGRVMSTRKAKKLFSVEDQIRATAHVECRKDAEVI DEIPMAYKDIDAVMAAQSDLVEVIYTLRQVVCVKG
Research Area	Others
Source	Yeast
Target Names	rtcB
Protein Names	Recommended name: RNA-splicing ligase RtcB EC= 6.5.1.-
Expression Region	1-408aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	47.2kDa
Protein Length	Full Length



Image



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

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.