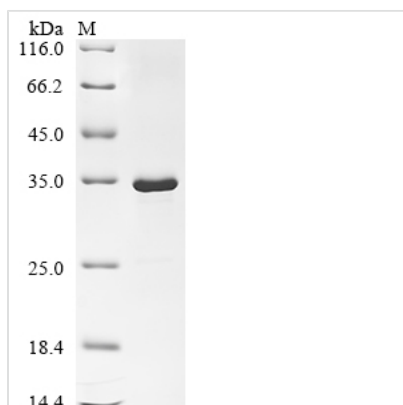




Recombinant Escherichia phage T7 T7 RNA polymerase (1), partial

Product Code	CSB-EP018353EEB
Abbreviation	Recombinant Escherichia phage T7 T7 RNA polymerase protein, partial
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.	P00573
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol.If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Enterobacteria phage T7 T7 RNA polymerase(1),partial
Immunogen Species	Escherichia phage T7 (Bacteriophage T7)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PPKPWTGITGGGYWANGRRPLALVRTHSKKALMRYEDVYMPEVYKAINIAQN TAWKINKKVLAVANVITKWKHCPVEDIPAIEREELPMKPEDIDMNPEALTAWKR AAAVYRKDKARKSRRISLEFMLEQANKFANHKAIWFPYNMDWRGRVYAVSM FNPQGNDMTKGLLTLAKGKPIGKEGYWLKIHGANCAGVDKVPFPERIKFIEEN HENIMACAKSPLENTWWAEQDSPF
Research Area	Signal Transduction
Source	E.coli
Target Names	1
Expression Region	274-509aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	34.6 kDa
Protein Length	Partial
Image	



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

Description

The expression region of this recombinant Escherichia phage T7 (Bacteriophage T7) T7 RNA polymerase covers amino acids 274-509. The expected molecular weight for the T7 RNA polymerase protein is calculated to be 34.6 kDa. This T7 RNA polymerase recombinant protein is manufactured in e.coli. The T7 RNA polymerase coding gene included the N-terminal 10xHis tag and C-terminal Myc tag, which simplifies the detection and purification processes of the recombinant T7 RNA polymerase protein in following stages of expression and purification.

The Escherichia phage T7 RNA polymerase (T7 RNAP) is an enzyme encoded by the T7 bacteriophage genome. It is a single-subunit RNA polymerase that recognizes and transcribes genes under the control of T7 promoter sequences. T7 RNAP is highly specific and efficient, making it a valuable tool in molecular biology research, particularly for in vitro transcription of RNA. Its use is prevalent in various applications, such as synthesizing RNA probes, producing RNA for structural studies, and generating messenger RNA (mRNA) for recombinant protein expression. T7 RNAP has become a standard component in molecular biology laboratories for its robustness and utility in diverse experimental techniques.

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.