

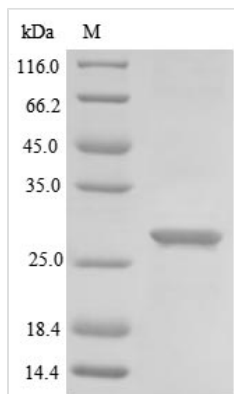


Recombinant Zaire ebolavirus RNA-directed RNA polymerase L (L), partial

Product Code	CSB-EP313164ZABb1
Relevance	<p>RNA-directed RNA polymerase that catalyzes the transcription of viral mRNAs, their capping and polyadenylation. The template is composed of the viral RNA tightly encapsidated by the nucleoprotein (N). The viral polymerase binds to the genomic RNA at the 3' leader promoter, and transcribes subsequently all viral mRNAs with a decreasing efficiency. The first gene is the most transcribed, and the last the least transcribed. The viral phosphoprotein acts as a processivity factor. Capping is concomitant with initiation of mRNA transcription. Indeed, a GDP polyribonucleotidyl transferase (PRNTase) adds the cap structure when the nascent RNA chain length has reached few nucleotides. Ribose 2'-O methylation of viral mRNA cap precedes and facilitates subsequent guanine-N-7 methylation, both activities being carried by the viral polymerase. Polyadenylation of mRNAs occur by a stuttering mechanism at a slippery stop site present at the end viral genes. After finishing transcription of a mRNA, the polymerase can resume transcription of the downstream gene. RNA-directed RNA polymerase that catalyzes the replication of viral genomic RNA. The template is composed of the viral RNA tightly encapsidated by the nucleoprotein (N). The replicase mode is dependent on intracellular N protein concentration. In this mode, the polymerase replicates the whole viral genome without recognizing transcriptional signals, and the replicated genome is not capped or polyadenylated.</p>
Abbreviation	Recombinant Zaire ebolavirus RNA-directed RNA polymerase L 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.	Q05318
Product Type	Recombinant Protein
Immunogen Species	Zaire ebolavirus (strain Mayinga-76) (ZEBOV) (Zaire Ebola virus)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	RGSSFVTDLEKYNLAFRYEFTAPFIEYCNRCYGVKNVFNWMHYTIPQCYMHVS DYYNPPHNLTLNDRNPPEGPPSSYRGHMGGIEGLQQKLWTSISCAQISLVEIK TGFKLRSAVMGDNQCITVLSVFPLETDADEQEQAEDNAARVAASLAKVTSAC GIFLKPDETFVHSGFIYFGKKQYLNG
Research Area	Others
Source	E.coli
Target Names	L
Protein Names	Large structural protein Replicase Transcriptase



Expression Region	625-809aa
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	27.9 kDa
Protein Length	Partial

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.