

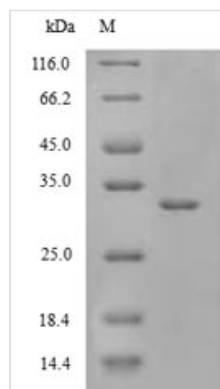


Recombinant Drosophila melanogaster DNA-directed RNA polymerase II subunit RPB1 (RpII215), partial

Product Code	CSB-YP018327DLU
Relevance	DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Largest and catalytic component of RNA polymerase II which synthesizes mRNA precursors and many functional non-coding RNAs. Forms the polymerase active center together with the second largest subunit. Pol II is the central component of the basal RNA polymerase II transcription machinery. It is composed of mobile elements that move relative to each other. RPB1 is part of the core element with the central large cleft, the clamp element that moves to open and close the cleft and the jaws that are thought to grab the incoming DNA template. At the start of transcription, a single-stranded DNA template strand of the promoter is positioned within the central active site cleft of Pol II. A bridging helix emanates from RPB1 and crosses the cleft near the catalytic site and is thought to promote translocation of Pol II by acting as a ratchet that moves the RNA-DNA hybrid through the active site by switching from straight to bent conformations at each step of nucleotide addition. During transcription elongation, Pol II moves on the template as the transcript elongates. Elongation is influenced by the phosphorylation status of the C-terminal domain (CTD) of Pol II largest subunit (RPB1), which serves as a platform for assembly of factors that regulate transcription initiation, elongation, termination and mRNA processing
Abbreviation	Recombinant Drosophila melanogaster RpII215 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.	P04052
Alias	DNA-directed RNA polymerase III largest subunit
Product Type	Recombinant Protein
Immunogen Species	Drosophila melanogaster (Fruit fly)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	YSPTSPNYTASSPGGASPNYSPSSPNYSPTSPLYASPRYASTTPNFNPQSTG YSPSSSGYSPTSPVYSPTVQFQSSPSFAGSGSNIYSPGNAYSPSSSNYSPNS PSYSPTSPSYSPSSPSYSPTSPCYSPTSPSYSPSTPNYTPVTPSYSPSTPNYS ASPQYSPASPAYSQTGVKYSPTSPTYSPSPSYDGGSPGSPQYTPGSPQYSPA SPKYSPTSPLYSPSSPQHSPSNQYSPTGSTYSATSPRYSPNMSIYSPSSTKYS PTSPTYTPTARNYSPTSPMYSPTAPSHYSPTSPAYSPSSPT
Research Area	Others



Source	Yeast
Target Names	RpII215
Protein Names	Recommended name: DNA-directed RNA polymerase II subunit RPB1 Short name= RNA polymerase II subunit B1 EC= 2.7.7.6 Alternative name(s): DNA-directed RNA polymerase III largest subunit
Expression Region	1579-1881aa
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	33.6kDa
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.