

Datasheet for ABIN7563145
POLA1 Protein (AA 1-1465) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	POLA1
Protein Characteristics:	AA 1-1465
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This POLA1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Pola1 Protein expressed in mammalian cells.
Sequence:	MAPMHEEDCK LEASAVSDSG SFAASRARRE KSKKGRQEA LERLKKAKAG EKYKYEVEDL TSVYEEVDEE QYSKLVQARQ DDDWIVDDDG IGYVEDGREI FDDDLEDDAL DTCGKGSDGK AHRKDRKDVK KPSVTKPNNI KAMFIASAGK KTTDKAVDLS KDLLGDILQ DLNTETAQIT PPPVLIPKKK RSTGALLNPF SVHTPKAIPS GKPASPVLRN EPLLTPIPLK RAELAGELAQ PECPEDQEL GVMEFEDGDF DESMDTEKVD EKPVTAKTWD QETEPVERVE HEADPERGTT SYLENFLPDV SCWDIDQDDE SIPQEVQVDS SNLPLVKGAD DEQVFQFYWL DAYEDPYNQP GVVFLFGKVV IESVKTHVSC CVMVKNIERT LYFLPREMKF DLNTGKETAI PVTMKDVYEE FDSKISAKYK IMKFKSKIVE KNYAFEIPDV PEKSEYLEVR YSAEVPQLPQ NLKGETFSHV FGTNTSSLEL FLMNRKIKGP CWLEVKNPQL LNQPISWCKF EVMALKPDLV NVIKDVSPPP LVVMSFSMKT MQNVQNHQHE IIAMAALVHH SFALDKAPPE PPFQTHFCVV SKPKDCIFPC DFKEVISKKN MKVEIAATER TLIGFFLAKV HKIDPDILVG HNICSFELEV LLQRINECKV PYWSKIGRLR RSNMPKLGSR SGFGERNATC GRMICDVEIS AKELIHCKSY HLSSELVQQIL

KTERIVIPTE NIRNMYSESS YLLYLLEHIW KDARFILQIM CELNVLPLAL QITNIAGNIM
SRTLMGGRSE RNEFLLLHAF YENNYIVPDK QIFRKPQKL GDEDEEIDGD TNKYKKGRKK
ATYAGGLVLD PKVGFYDKFI LLLDFNSLYP SIIQEFNICF TTVQRVTSSEV QKATEDEEQE
QIPELPDPNL EMGILPREIR KLVERRKQVK QLMKQQLNP DLVLQYDIRQ KALKLTANSM
YGCLGFSYSR FYAKPLAALV TYKGREILMH TKDMVQKMNL EVIYGDTSI MINTNSTNLE
EVFKLGNKVK SEVNKLYKLL EIDIDAVFKS LLLLKKKKYA ALVVEPTSDG NYITKQELKG
LDIVRRDWCD LAKDTGNFVI GQILSDQSRD TIVENIQKRL IEIGENVLNG SVPVSQFEIN
KALTKDPQDY PDRKSLPHVH VALWINSQGG RKKVAGDTSV YVICQDGSNL TATQRAYAPE
QLQKLDNLAI DTQYYLAQQI HPVVARICEP IDGIDAVLIA LWLGLDSTQF RVHQYHKDEE
NDALLGGPAQ LTDEEKYKDC EKFKCLCPSC GTENIYDNVF EGSGLDMEPS LYRCSNVDCCK
VSPLTFMVQL SNKLIMDIRR CIKKYYDGWL ICEEPTCCSR LRRPLHFHR NGPLCPVCMK
AVLRPEYSDK SLYTQLCFYR YIFDADCALE KLTEHEKDKL KKQFFPLRVL QDYRKVKNIA
EQFLSWGYS EVNLSKLFAN YAGKS **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target:	POLA1
Alternative Name:	Pola1 (POLA1 Products)
Background:	<p>DNA polymerase alpha catalytic subunit (EC 2.7.7.7) (DNA polymerase alpha catalytic subunit p180),FUNCTION: Catalytic subunit of the DNA polymerase alpha complex (also known as the alpha DNA polymerase-primase complex) which plays an essential role in the initiation of DNA synthesis (PubMed:8253737, PubMed:8026492). During the S phase of the cell cycle, the DNA polymerase alpha complex (composed of a catalytic subunit POLA1, a regulatory subunit POLA2 and two primase subunits PRIM1 and PRIM2) is recruited to DNA at the replicative forks via direct interactions with MCM10 and WDHD1. The primase subunit of the polymerase alpha complex initiates DNA synthesis by oligomerising short RNA primers on both leading and lagging strands. These primers are initially extended by the polymerase alpha catalytic subunit and subsequently transferred to polymerase delta and polymerase epsilon for processive synthesis on the lagging and leading strand, respectively. The reason this transfer occurs is because the polymerase alpha has limited processivity and lacks intrinsic 3' exonuclease activity for proofreading error, and therefore is not well suited for replicating long complexes. In the cytosol, responsible for a substantial proportion of the physiological concentration of cytosolic RNA:DNA hybrids, which are necessary to prevent spontaneous activation of type I interferon responses. {ECO:0000250 UniProtKB:P09884, ECO:0000269 PubMed:8026492, ECO:0000269 PubMed:8253737}.</p>
Molecular Weight:	167.3 kDa
UniProt:	P33609
Pathways:	SARS-CoV-2 Protein Interactome

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Handling

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months