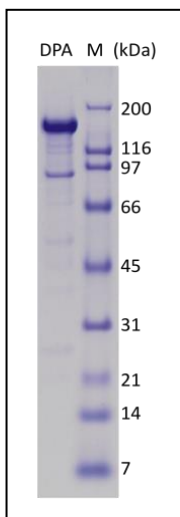


Recombinant DNA Polymerase alpha

Catalog Number	Size
AG320-10	10ug
AG320-25	25ug
AG320-B	Bulk

Description

The recombinant DNA polymerase alpha (POLA1) was expressed in the baculovirus system and purified by the combination of Ni-affinity column and other conventional chromatographic methods. The resulted protein contains 1474 (1462+12) amino acids with an 6His tag at the C-terminus. It migrates in SDS-PAGE with an apparent molecular mass of 170kDa.



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MAPVHGDDSLSDSGSFVSSRARREKKS KKG RQEALERLKKAKAGEKYKYE
VEDFTGVYEEVDEEQYSKLVQARQDDDWIVDDDGIGYVEDGREIFDDDLLE
DDALDADEKGDGKARNKDKRNVKKLAVTKPNNIKSMFIACAGKKTADKA
VDLSKDGLLG DILQDLNTETPQITPPPVMILKKKRSIGASPNPFSVHTAT
AVPSGKIASPVSRKEPPLTPVPLKRAEFAGDDVQVESTEEEQESGAMEFE
DGD FDEPMEVEEVDLEPMAAKAWDKESPAEEVKQEADSGKGTVSYLGSF
LPDVSCWDIDQEGDSSFSVQEVQVDSSHLPLVKGADDEQVFHFYWLDAYE
DQYNQPGVVFLFGKVWIESAETHVSCCMVKNIERTLYFLPREMKIDLNT
GKETGTPISMKDVYEEFDEKIATKYKIMKFKSKPVEKNYAFEIPDVPEKS
EYLEVKYSAEMPQLPQDLKGETFSHVFGTNTSSLEFLMNRKIKGPCWLE
VKSPQLLNQPVSWCKVEAMALKPDLVNVIKDVSPPLVMAFSMKTMQNA
KNHQNEII IAMAALVHHSFALDKAAPKPPFQSHFCVVS KPKDCIFPYAFKE
VIEKKNVKVEVAATERTLLGFFLAKVHKIDPDIIVGHNIYGFELEVLLQR
INVCKAPHWSKIGRLKRSNMPKLGGRSGFGERNATCGRMICDVEISAKEL
IRCKSYHLSELVQQILKTERVVI PMENIQNMYSESSQLLYLLEHTWKDAK
FILQIMCELNVLPALQITNIAGNIMSRTLMGGRSERNEFLLLHAFYENN
YIVPDKQIFRK PQQLGDEDEEIDGDTNKYKKG RKAAYAGGLVLDPKVG
FYDKFILL LDFNSLYPSIIQEFNICFTTVQRVASEAQKVTEDEGEQEIQPE
LPDPSLEMGILPREIRKLVERRKQVKQLMKQQDLNPDILIQYDIRQKALK
LTANS MYGCLGFSYSRFYAKPLAALV TYKGREILMHTKEMVQKMNLEVIY
GDTDSIMINTNSTNLEE VFKLG NKVKSEVNKLYKLEIDIDGVFKSLLLL
KKKKY AALVVEPTSDGNYVT KQELKGLDIVRRDWCDLAKDTGNFVIGQIL
SDQSRDTIVENIQRLIEIGENVLNGSV PVSQFEINKALT KDPQDYPDKK
SLPHVHVALWINSQGRKVKAGDTVSYVICQDGSNL TASQRAYAPEQLQK
QDNLTIDTQYYLAQQIHPVVARICEPIDGIDAVLIATWLG LDPTQFRVHH
YHKDEENDALLGGPAQLTDEEKYRDCERFKCPCPTCGTENIYDNVFDGSG
TDMEPSLYRCSNIDCKASPLTFTVQLSNKLIMDIRRFIKKYD GWLICEE
PTCRNRTRHLPLQFSRTGPLCPACMKATLQPEYSDKSLYTQLCFYRYIFD
AECAL EKLTTDHEKDKLKKQFFTPKVLQDYRKLKNTAEQFLSRSGYSEVN
LSKLFAGCAVKS GGVVDGHHHHHH*

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Accession Number	NM_016937
Molecular Mass	Approximately 170kDa.
Purity	≥90%, as determined by SDS-PAGE.
Biological Activity	Human DNA polymerase α (POLA1) is the catalytic subunit of DNA polymerase and plays an essential role in the initiation of DNA replication (see Fig 1 for the activity test). The recombinant DNA polymerase α protein can be used for the studies of DNA synthesis and other related function assays.
Formulation	20mM Tris-Cl (pH7.9), 20% glycerol 100mM NaCl, 1mM DTT and 1mM EDTA.
Storage	The protein sample can be stored under sterile conditions at 2-8°C for one month or at -20°C to -70°C for three months without detectable loss of activity. (Avoid repeated freeze-thaw cycle)

FOR RESEARCH USE ONLY!!!

Fig 1: Activity test of DNA polymerase α (L011826G)

