

DNA polymerase subunit gamma-2 Recombinant Protein | POLG2 recombinant protein

Recombinant Human DNA polymerase subunit gamma-2, mitochondrial

CATALOG # AAA117758	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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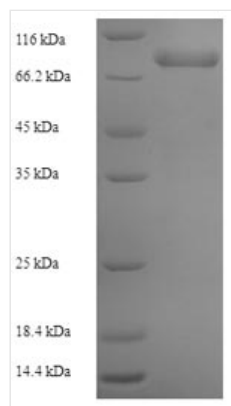
PRODUCT SYNONYMS

DNA polymerase subunit gamma-2; Recombinant Human DNA polymerase subunit gamma-2; mitochondrial; DNA polymerase gamma accessory 55 kDa subunit; p55; Mitochondrial DNA polymerase accessory subunit; MtPolB; PolG-beta; POLG2 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-485aa; Full Length
Sequence	MRSRVAVRAC HKVCRCLLSG FGGRVDAGQP ELLTERSSPK GGHVKSHAE EGNGEHPEAP GSGEGSEALL EICQRRHFLS GSKQQLSRDS LLSGCHPGFG PLGVELRKNL AAEWWTSVVV FREQVFPVDA LHHKPGPLLP GDSAFRLVSA ETLREILQDK ELSKEQLVAF LENVLKTSKG LRENLLHGAL EHYVNCLDLV NKRLPYGLAQ IGVCFHPVFD TKQIRNGVKS IGEKTEASLV WFTPPRTSNQ WLDFWLRHRL QWWRKFAMSP SNFSSSDCQD EEGRKGKGLY YNFPWGKELI ETLWNLGDHE LLHMYPGNVS KLHGRDGRKN VVPCVLSVNG DLDRGMLAYL YDSFQLTENS FTRKKNLHRK VLKLHPC LAP IKVALDVGRG PTELRQVCQ GLFNELLENG ISVWPGYLET MQSSLEQLYS KYDEMSILFT VLVTTETTLEN GLIHLRSRDT TMKEMMHISK LKDFLIKYIS SAKNV
Sequence Length	485
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for POLG2 recombinant protein	Mitochondrial polymerase processivity subunit. Stimulates the polymerase and exonuclease activities, and increases the processivity of the enzyme. Binds to ss-DNA.
Product Categories/Family for POLG2 recombinant protein	Transcription

References	The mitochondrial p55 accessory subunit of human DNA polymerase gamma enhances DNA binding, promotes processive DNA synthesis, and confers N-ethylmaleimide resistance.Lim S.E., Longley M.J., Copeland W.C.J. Biol. Chem. 274:38197-38203(1999) Protein sequences conserved in prokaryotic aminoacyl-tRNA synthetases are important for the activity of the processivity factor of human mitochondrial DNA polymerase.Carrodegua J.A., Bogenhagen D.F.Nucleic Acids Res. 28:1237-1244(2000) Human mitochondrial DNA polymerase holoenzyme reconstitution and characterization.Johnson A.A., Tsai Y.-C., Graves S.W., Johnson K.A.Biochemistry 39:1702-1708(2000) Accessory subunit of mitochondrial DNA polymerase from Drosophila embryos. Cloning, molecular analysis, and association in the native enzyme.Wang Y., Farr C.L., Kaguni L.S.J. Biol. Chem. 272:13640-13646(1997) Mutant POLG2 disrupts DNA polymerase gamma subunits and causes progressive external ophthalmoplegia.Longley M.J., Clark S., Man C.Y.W., Hudson G., Durham S.E., Taylor R.W., Nightingale S., Turnbull D.M., Copeland W.C., Chinnery P.F.Am. J. Hum. Genet. 78:1026-1034(2006) Progressive external ophthalmoplegia and vision and hearing loss in a patient with mutations in POLG2 and OPA1.Ferraris S., Clark S., Garelli E., Davidzon G., Moore S.A., Kardon R.H., Bienstock R.J., Longley M.J., Mancuso M., Gutierrez Rios P., Hirano M., Copeland W.C., DiMauro S.Arch. Neurol. 65:125-131(2008)
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NCBI AND UNIPROT INFORMATION

NCBI GI #	70887790
NCBI GeneID	11232
NCBI Accession #	NP_009146.2
NCBI GenBank Nucleotide #	NM_007215.3
UniProt Accession #	Q9UHN1; O00419; Q0IJ81; Q96GW2; Q9UK35; Q9UK94
Molecular Weight	70.9 kDa
NCBI Official Full Name	DNA polymerase subunit gamma-2, mitochondrial
NCBI Official Synonym Full Names	polymerase (DNA directed), gamma 2, accessory subunit
NCBI Official Symbol	POLG2
NCBI Official Synonym Symbols	HP55; POLB; PEOA4; POLGB; MTPOLB; POLG-BETA
NCBI Protein Information	DNA polymerase subunit gamma-2, mitochondrial
UniProt Protein Name	DNA polymerase subunit gamma-2, mitochondrial
UniProt Gene Name	POLG2
UniProt Synonym Gene Names	MTPOLB; p55
UniProt Entry Name	DPOG2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.