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## Recombinant Human DNA Polymerase gamma 1

Catalog Number	Size
AG322-10	10ug
AG322-25	25ug
AG322-B	Bulk

### Specifications and Use

#### Description

Recombinant human DNA polymerase gamma 1 (POLG1) was expressed in Sf9 cells and purified by an affinity column in combination of other chromatograph methods. The resulted protein is a monomeric polypeptide of 1251 (1239+12) amino acids with a 6His tag at the Cterminus. It migrates in SDS-PAGE with an apparent molecular mass of 145kDa.

MSRLLWRKVAGATVGP GP VPAPGRWVSSVPASDPSDGQR RRQQQQQQQQQQPQQPQVL SSEGQLRHNP LDI QML SRLH E QIFGQ GEMPGE A VRRSVEHLQKHGLWGQPAVPLPDVELRLPPLYGDNLDQHF RLLA QKQSLPYLE AANLLLQAQLPPKPPAWAEGWTRYGPEGEAVPVIAPEERALVFDVEVCLAEGTCPTLAVAISPSAWYSWC SQRLV E E R Y S W T S Q L S P A D L I P L E V P T G A S S P T Q R D W Q E Q L V V G H N V S F D R A H I R E Q Y L I Q G S R M R F L D T M S M H M A I S G L S F F Q R S L W I A A K Q G K H K V Q P P T K Q G Q K S Q R K A R R G P A I S S W D W L D I S S V N S L A E V H R L Y V G G P P L E K P R E L F V K G T M K D I R E N F Q D L M Q Y C A Q D V W A T H E V F Q Q Q L P L F E R C P H P V T L A G M L E M G V S Y L P V N Q N W E R Y L A E A Q G T Y E E L Q R E M K K S L M D L A N D A C Q L L S G E R Y K E D P W L W D L E W D L Q E F K Q K K A K K V K K E P A T A S K L P I E G A G A P G D P M D Q E D L G P C S E E E F Q Q D V M A R A C L Q K L K G T T E L P K R P Q H L P G H P G W Y R K L C P R L D D P A W T P G P S L L S L Q M R V T P K L M A L T W D G F P L H Y S E R H G W G Y L V P G R R D N L A K L P T G T T L E S A G V V C P Y R A I E S L Y R K H C L E Q G K Q Q L M P Q E A G L A E E F L L T D N S A I W Q T V E E D Y L E V E A E K M E N L R A A V P G Q P L A L T A R G G P K D T Q P S Y H H G N G P Y N D V D I P G C W F F K L P H K D G N S C N V G S P F A K D F L P K M E D G T L X A G P G G A S G P R A L E I N K M I S F W R N A H K R I S S Q M V V W L P R S A L P R A V I R H P D Y D E E G L Y G A I L P Q V V T A G T I T R R A V E P T W L T A S N A R P D R V G S E L K A M V Q A P P G Y T L V G A D V D S Q E L W I A A V L G D A H F A G M H G C T A F G W M T L Q G R K S R G T D L H S K T A T T V G I S R E H A K I F N Y G R I Y G A G Q P F A E R L L M Q F N H R L T Q Q E A A E K A Q Q M Y A A T K G L R W Y R L S D E G E W L V R E L N L P V D R T E G G W I S L Q D L R K V Q R E T A R K S Q W K K W E V V A E R A W K G G T E S E M F N K L E S I A T S D I P R T P V L G C C I S R A L E P S A V Q E E F M T S R V N W V V Q S S A V D Y L H L M V A M K W L F E E F A I D G R F C I S I H D E V R Y L V R E E D R Y R A A L A L Q I T N L L T R C M F A Y K L G L N D L P Q S V A F F S A V D I D R C L R K E V T M D C K T P S N P T G M E R R Y G I P Q G E A L D I Y Q I I E L T K G S L E K R S Q P G P G G G V D G H H H H H H \* H

**Accession Number**

NM\_002693

**Source**

Sf9

**Molecular Mass**

Approximately 145kDa.

**Purity**

≥90%, as determined by SDS-PAGE

**Biological Activity**

Human DNA polymerase gamma 1 (POLG1) is the catalytic subunit of mitochondrial DNA polymerase and plays an essential role in neurological diseases.

**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°o C for one month or at -20°o C to -70°o C for three months without detectable loss of activity.

**Special Notes**

**FOR RESEARCH ONLY**