

Recombinant Human POLG Protein, His-tagged

POLG-317H Human

Lot. No. (See product label)

Specification

Product Overview Recombinant Human POLG(Trp1041~Pro1239) fused with His tag at N-terminal was expressed in E. coli.

Description Mitochondrial DNA polymerase is heterotrimeric, consisting of a homodimer of accessory subunits plus a catalytic subunit. The protein encoded by this gene is the catalytic subunit of mitochondrial DNA polymerase. The encoded protein contains a polyglutamine tract near its N-terminus that may be polymorphic. Defects in this gene are a cause of progressive external ophthalmoplegia with mitochondrial DNA deletions 1 (PEOA1), sensory ataxic neuropathy dysarthria and ophthalmoparesis (SANDO), Alpers-Huttenlocher syndrome (AHS), and mitochondrial neurogastrointestinal encephalopathy syndrome (MNGIE). Two transcript variants encoding the same protein have been found for this gene.

Source E. coli

Species Human

Tag His

Form PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Molecular Mass 26.4kDa

Protein length Trp1041~Pro1239

Endotoxin <1.0EU per 1µg (determined by the LAL method)

Purity >95%

Applications Positive Control; Immunogen; SDS-PAGE; WB.
If bio-activity of the protein is needed, please check active protein.

Stability The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Storage Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.

Reconstitution Reconstitute in PBS or others.

Gene Information

Gene Name [POLG polymerase \(DNA directed\), gamma \[Homo sapiens \]](#)

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Official Symbol	POLG
Synonyms	POLG; polymerase (DNA directed), gamma; DNA polymerase subunit gamma-1; POLG1; POLGA; PolG-alpha; PolG, catalytic subunit; mitochondrial DNA polymerase catalytic subunit; PEO; MDP1; SCAE; MIRAS; SANDO; MTDPS4A; MTDPS4B; FLJ27114;
Gene ID	5428
mRNA Refseq	NM_001126131
Protein Refseq	NP_001119603
MIM	174763
UniProt ID	P54098

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