Recombinant Human POLG Protein, His-tagged

Cat. No. POLG-317H **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.
Species	Human
Source	E.coli
ProteinLength	Trp1041~Pro1239
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.
Form	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Molecular Mass	26.4kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method)

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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]
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

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MIM	174763
UniProt ID	P54098

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