

Recombinant Human POLG

Cat. No. POLG-28364TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human DNA Polymerase gamma with an N terminal proprietary tag; predicted mwt: 37.73 inclusive of tag.
Species	Human
Source	Wheat Germ
ProteinLength	110 amino acids
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.
Molecular Weight	37.730kDa inclusive of tags
Form	Liquid
Purity	Proprietary Purification

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage buffer	pH: 8.00Constituents:0.79% Tris HCl, 0.3% Glutathione
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	CISIHDEVRYLVREEDRYRAALALQITNLLTRCMFAYKLG LNDLPQSVAFFSAVDIDR CLRKEVTMDCKTPSNPTGMERR YGIPQGEALDIYQIIELTKGSLEKRSQPGP
Sequence Similarities	Belongs to the DNA polymerase type-A family.

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;
Gene ID	5428
mRNA Refseq	NM_001126131
Protein Refseq	NP_001119603
MIM	174763
Uniprot ID	P54098
Chromosome Location	15q24

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Pathway	DNA polymerase gamma complex, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Nucleotide Metabolism, organism-specific biosystem;
Function	DNA binding; DNA-directed DNA polymerase activity; chromatin binding; exonuclease activity; nucleotidyltransferase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA