



# Recombinant Human DNA polymerase subunit gamma-1 (POLG), partial

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| <b>Product Code</b>      | CSB-BP018313HU   |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.  |
| <b>Uniprot No.</b>       | P54098   |
| <b>Product Type</b>      | Recombinant Protein  |
| <b>Immunogen Species</b> | Homo sapiens (Human)   |
| <b>Purity</b>            | >85% (SDS-PAGE)  |
| <b>Source</b>            | Baculovirus  |
| <b>Target Names</b>      | POLG   |
| <b>Protein Names</b>     | Recommended name: DNA polymerase subunit gamma-1 EC= 2.7.7.7<br>Alternative name(s): Mitochondrial DNA polymerase catalytic subunit PolG-alpha   |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.  |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.  |
| <b>Protein Length</b>    | Partial  |
| <b>Target Details</b>    | Mitochondrial DNA polymerase is heterotrimeric, consisting of a homodimer of accessory subunits plus a catalytic subunit. This protein 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. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.  |
| <b>Shelf Life</b>        | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.  |