

POLG Antibody / DNA polymerase subunit gamma 1 [clone 24P93] (RQ8888)

Catalog No.	Formulation	Size
RQ8888	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	24P93
Purity	Affinity chromatography
UniProt	P54098
Applications	Western Blot : 1:500-1:2000
Limitations	This POLG antibody is available for research use only.



Western blot testing of human 1) MCF7, 2) Jurkat and 3) SiHa cell lysate with POLG antibody. Predicted molecular weight ~140 kDa.

Description

DNA polymerase subunit gamma 1 (POLG) is the catalytic subunit of the mitochondrial DNA polymerase complex, responsible for replication and repair of mitochondrial DNA. POLG ensures accurate DNA synthesis within mitochondria, which is essential for proper oxidative phosphorylation and cellular energy production.

Mutations in POLG are associated with a range of mitochondrial disorders, including progressive external ophthalmoplegia, Alpers-Huttenlocher syndrome, and ataxia-neuropathy syndromes. Studying POLG function helps

researchers understand mitochondrial genome maintenance and the molecular basis of mitochondrial diseases.

Using a high-quality POLG antibody allows for sensitive detection of the protein in assays such as western blot, immunohistochemistry, and immunofluorescence. A POLG antibody from NSJ Bioreagents offers consistent performance, supporting studies in mitochondrial biology, genetic disorders, and DNA repair mechanisms. Choosing the right POLG antibody is critical for producing reliable and reproducible research results.

Application Notes

Optimal dilution of the POLG antibody should be determined by the researcher.

Immunogen

A peptide sequence specific to DNA polymerase subunit gamma 1 was used as the immunogen for the POLG antibody.

Storage

After reconstitution, the POLG antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.