

**POLG2 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2838b****Specification**

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**POLG2 Antibody (C-term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P, FC,E        |
| Primary Accession | <a href="#">Q9UHN1</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Antigen Region    | 348-376                |

**POLG2 Antibody (C-term) - Additional Information****Gene ID** 11232**Other Names**

DNA polymerase subunit gamma-2, mitochondrial, DNA polymerase gamma accessory 55 kDa subunit, p55, Mitochondrial DNA polymerase accessory subunit, MtPolB, PolG-beta, POLG2, MTPOLB

**Target/Specificity**

This POLG2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 348-376 amino acids from the C-terminal region of human POLG2.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

POLG2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**POLG2 Antibody (C-term) - Protein Information****Name** POLG2

**Synonyms** MTPOLB

**Function** Mitochondrial polymerase processivity subunit. It regulates the polymerase and exonuclease activities promoting processive DNA synthesis. Binds to ss-DNA.

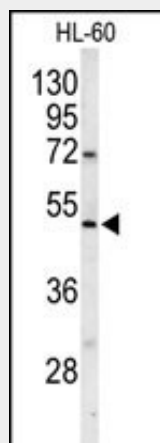
**Cellular Location**

Mitochondrion.

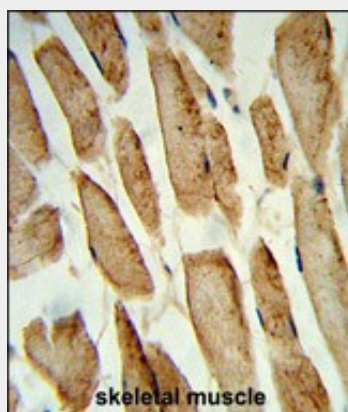
**POLG2 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

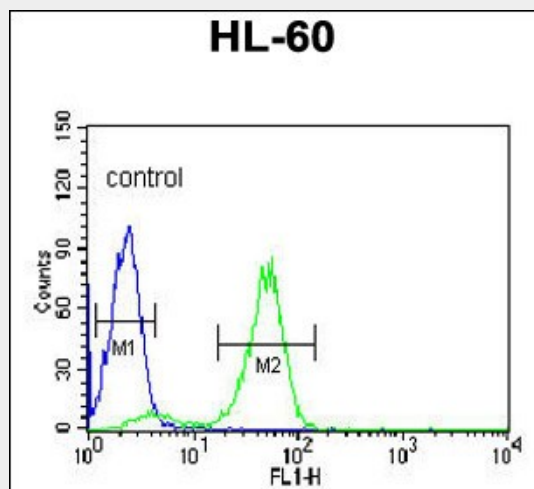
**POLG2 Antibody (C-term) - Images**

Western blot analysis of POLG2 Antibody (C-term) (Cat. #AP2838b) in HL-60 cell line lysates (35ug/lane). POLG2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with POLG2 Antibody

(C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



POLG2 Antibody (C-term) (Cat. #AP2838b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **POLG2 Antibody (C-term) - Background**

The accuracy of mitochondrial DNA (mtDNA) replication depends on the coordinated action of many nuclear-encoded proteins and on the correct balance of nucleotides within the mitochondrial matrix. mtDNA is replicated by DNA polymerase gamma, which is composed of a 140-kD catalytic subunit (POLG1) and a 55-kD accessory subunit (POLG2).

#### **POLG2 Antibody (C-term) - References**

Longley, M.J., Am. J. Hum. Genet. 78 (6), 1026-1034 (2006)  
Carrodeguas, J.A., J. Biol. Chem. 277 (51), 50008-50014 (2002)

#### **POLG2 Antibody (C-term) - Citations**

- [The modulation of vascular ATP-sensitive K<sup>+</sup> channel function via the phosphatidylinositol 3-kinase-Akt pathway activated by phenylephrine.](#)