

Catalog #: 62489

Aliases

DNA Polymerase Gamma, Catalytic Subunit; POLG1; POLGA; Mitochondrial DNA Polymerase Catalytic Subunit; Polymerase (DNA) Gamma, Catalytic Subunit; Polymerase (DNA Directed), Gamma; DNA Polymerase Subunit Gamma-1; PolG-Alpha; EC 2.7.7.7; MDP1; Mitochondrial Polymerase Gamma Catalytic Subunit; MTDPS4A; MTDPS4B; MIRAS; SANDO; SCAE; PEO

Background

Gene Name: POLG NCBI Gene Entry: 5428 UniProt Entry: P54098

Application Information

Molecular Weight: Predicted, 140 kDa, observed, 140 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 24GB1085

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

Immunogen

A synthesized peptide derived from human DNA Polymerase gamma

Isotype

Rabbit IgG

Storage Buffer

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

Storage

Store at -20 °C for one year.

Recommended Dilutions

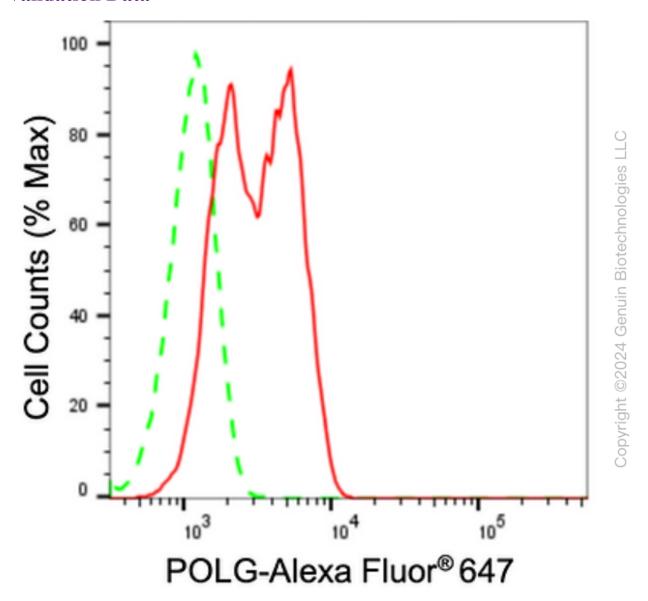
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

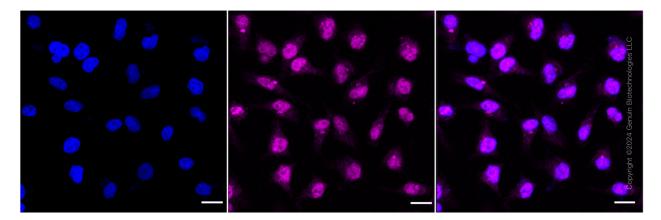
Immunocytochemistry (IC): 1:100-1:1,000

Note: This product is for research use only.

Validation Data

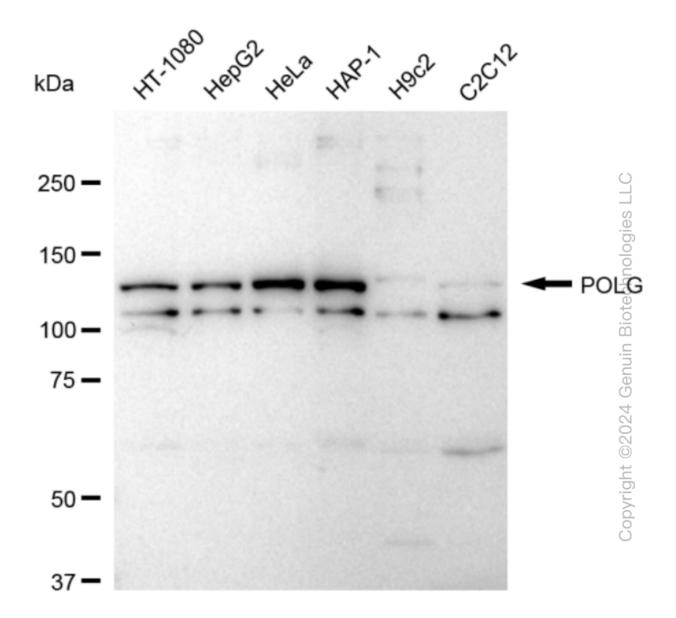


Flow cytometric analysis of POLG expression in HeLa cells using POLG antibody (Cat#62489, 1:2,000). Green, isotype control; red, POLG.

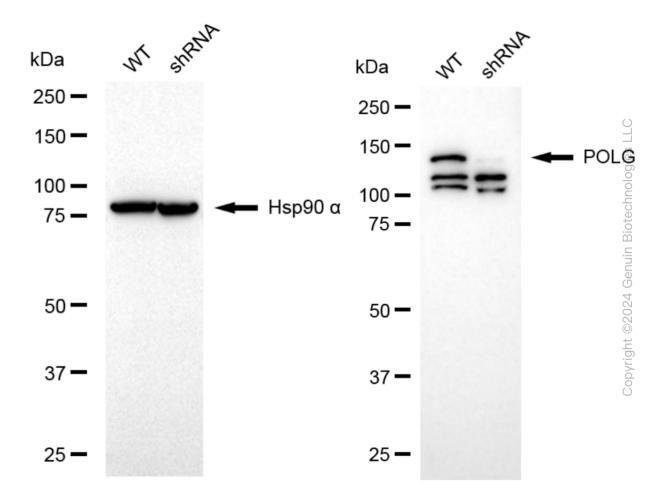


Immunocytochemical staining of HeLa cells with anti-POLG antibody (Cat#62489, 1:1,000). Nuclei were stained blue with DAPI; POLG was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain:Medium . Scale bar: $20~\mu m$.

TEL: +1-540-855-7041



Western blotting analysis using anti-POLG antibody (Cat#62489). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-POLG antibody (Cat#62489, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-POLG antibody (Cat#62489). POLG expression in wild-type (WT) and POLG shRNA knockdown (KD) HT-1080 cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-POLG antibody (Cat#62489, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQTM ECL Substrate Kit (Cat#716).