

Anti-DNA Polymerase gamma 2 Antibody
Rabbit polyclonal antibody to DNA Polymerase gamma 2
Catalog # AP60362

Specification

Anti-DNA Polymerase gamma 2 Antibody - Product Information

Application	WB, IHC
Primary Accession	O9UHN1
Other Accession	O9QZM2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54911

Anti-DNA Polymerase gamma 2 Antibody - Additional Information

Gene ID 11232

Other Names

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

Target/Specificity

Recognizes endogenous levels of DNA Polymerase gamma 2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-DNA Polymerase gamma 2 Antibody - Protein Information

Name POLG2 {ECO:0000303|PubMed:30157269, ECO:0000312|HGNC:HGNC:9180}

Function

Accessory subunit of DNA polymerase gamma solely responsible for replication of mitochondrial DNA (mtDNA). Acts as an allosteric regulator of the holoenzyme activities. Enhances the polymerase activity and the processivity of POLG by increasing its interactions with the DNA template. Suppresses POLG exonucleolytic proofreading especially toward homopolymeric templates bearing mismatched termini. Binds to single-stranded DNA.

Cellular Location

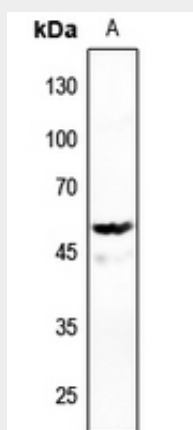
Mitochondrion {ECO:0000250|UniProtKB:P54098}. Mitochondrion matrix, mitochondrion nucleoid {ECO:0000250|UniProtKB:P54098}

Anti-DNA Polymerase gamma 2 Antibody - Protocols

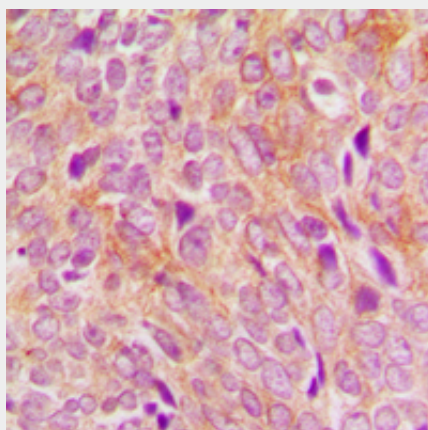
Provided below are standard protocols that you may find useful for product applications.

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

Anti-DNA Polymerase gamma 2 Antibody - Images



Western blot analysis of DNA Polymerase gamma 2 expression in rat kidney (A) whole cell lysates.



Immunohistochemical analysis of DNA Polymerase gamma 2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and

mounted with DPX.

Anti-DNA Polymerase gamma 2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DNA Polymerase gamma 2. The exact sequence is proprietary.