

Anti-DNA Polymerase gamma 2 Antibody

Rabbit polyclonal antibody to DNA Polymerase gamma 2 Catalog # AP60362

Product Information

ApplicationWB, IHCPrimary AccessionQ9UHN1Other AccessionQ9QZM2

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW54911

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 KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human DNA Polymerase gamma 2. The exact sequence is

proprietary.

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

(1/100 - 1/200)

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

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.

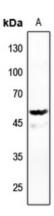
Cellular Location Mitochondrion {ECO:0000250 | UniProtKB:P54098}. Mitochondrion matrix,

mitochondrion nucleoid {ECO:0000250 | UniProtKB:P54098}

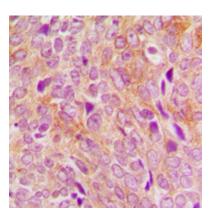
Background

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

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.