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Anti-DNA Polymerase gamma 2 Antibody

Rabbit polyclonal antibody to DNA Polymerase gamma 2
Catalog # AP60362

Product Information

Application	WB, IHC
Primary Accession	Q9UHN1
Other Accession	Q9QZM2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54911

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), 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

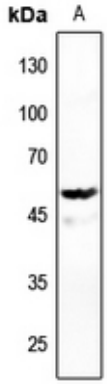
Protein Information

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}

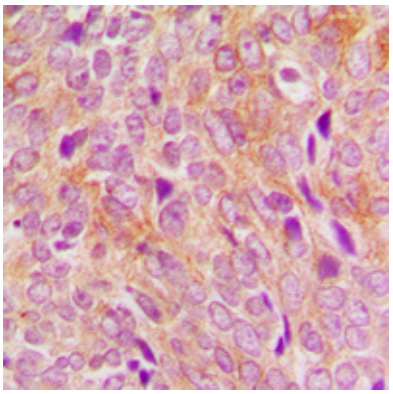
Background

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.