

## ARG40038 anti-DNA Ligase 3 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes DNA Ligase 3
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	DNA Ligase 3
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 730-1009 of Human DNA Ligase 3 (NP_039269.2).
Conjugation	Un-conjugated
Alternate Names	DNA ligase III; EC 6.5.1.1; Polydeoxyribonucleotide synthase [ATP] 3; LIG2; DNA ligase 3

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	112 kDa	

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

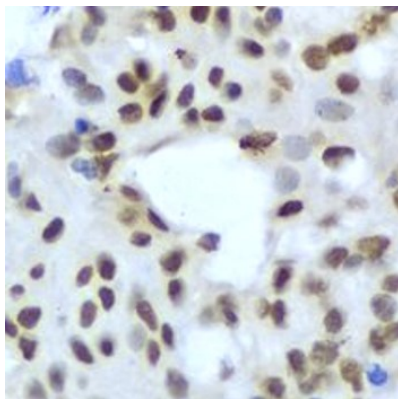
## Bioinformation

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Gene Symbol	LIG3
Gene Full Name	ligase III, DNA, ATP-dependent
Background	This gene is a member of the DNA ligase family. Each member of this family encodes a protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and is located in both the mitochondria and nucleus, with translation initiation from the upstream start codon allowing for transport to the mitochondria and translation initiation from a downstream start codon allowing for transport to the nucleus. Additionally, alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]
Function	Isoform 3 functions as heterodimer with DNA-repair protein XRCC1 in the nucleus and can correct defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents. Isoform 1 is targeted to mitochondria, where it functions as DNA ligase in mitochondrial base-excision DNA repair. [UniProt]
Calculated Mw	113 kDa
Cellular Localization	Isoform 1: Mitochondrion. Note=Contains an N-terminal mitochondrial transit peptide. Isoform 2: Mitochondrion. Note=Contains an N-terminal mitochondrial transit peptide. Isoform 3: Nucleus. Note=Lacks the N-terminal mitochondrial transit peptide. Isoform 4: Nucleus. Note=Lacks the N-terminal mitochondrial transit peptide. [UniProt]

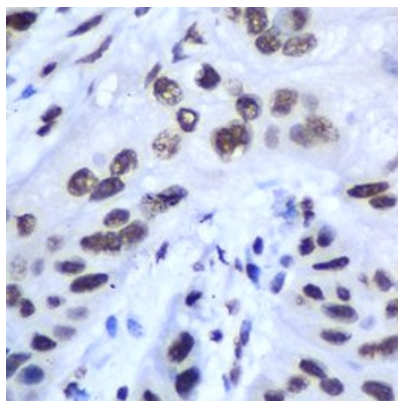
## Images

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ARG40038 anti-DNA Ligase 3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human oophoroma stained with ARG40038 anti-DNA Ligase 3 antibody at 1:100 dilution.



ARG40038 anti-DNA Ligase 3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human esophageal cancer stained with ARG40038 anti-DNA Ligase 3 antibody at 1:100 dilution.