

Rabbit LIG3 Polyclonal Antibody | anti-LIG3 antibody

LIG3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326442	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

LIG3; Polyclonal Antibody; LIG3 Antibody; D11Wsu78e; DNA ligase; DNA ligase 3; DNA ligase III; DNLI3_HUMAN; LIG 3; LIG2; Ligase II; DNA; ATP dependent; Ligase III DNA ATP dependent; MGC78176; OTTMUSP00000000875; Polydeoxyribonucleotide synthase [ATP] 3; Polydeoxyribonucleotide synthase [ATP]; Polydeoxyribonucleotide synthase; RP23-316C11.6; anti-LIG3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	LIG3 antibody detects endogenous levels of total LIG3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	949
Applicable Applications for anti-LIG3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human LIG3
Subcellular Location	Nucleus.
Tissue Specificity	Testis, thymus, prostate and heart.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA326442 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of extracts of testis, using LIG3 antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA326442 staining K562 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-LIG3 antibody	Description: 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 (PubMed:10207110, PubMed:24674627). Subunit Structure: Isoform 3 interacts (via BRCT domain) with the nuclear DNA-repair protein XRCC1. Similarity: The PARP-type zinc finger is required for DNA ligase activity. Belongs to the ATP-dependent DNA ligase family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	73747844
NCBI GeneID	3980
NCBI Accession #	NP_002302.2
NCBI GenBank Nucleotide #	NM_002311.4
UniProt Accession #	P49916; Q16714; Q6NVK3; E5KLB5; E5KLB6
Molecular Weight	Observed: 113 kDa Predicted: 113 kDa
NCBI Official Full Name	DNA ligase 3 isoform beta
NCBI Official Synonym Full Names	DNA ligase 3
NCBI Official Symbol	LIG3
NCBI Official Synonym Symbols	LIG2; LIG3alpha
NCBI Protein Information	DNA ligase 3
UniProt Protein Name	DNA ligase 3
UniProt Gene Name	LIG3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.