

Rabbit anti-Human LIG1 Polyclonal Antibody | anti-LIG1 antibody

Anti-LIG1 Antibody, Rabbit Polyclonal

CATALOG # AAA256557	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunohistochemistry
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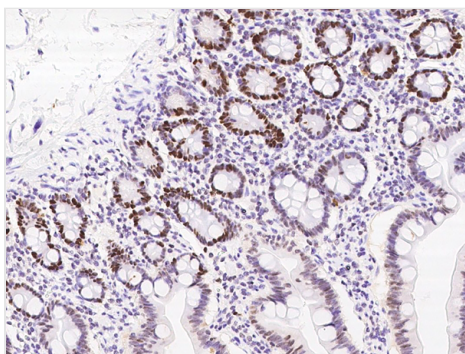
PRODUCT SYNONYMS

LIG1; Polyclonal Antibody; Anti-LIG1 Antibody; Rabbit Polyclonal; LIG1 Antibody; Rabbit PAb; Antigen Affinity Purified; anti-LIG1 antibody

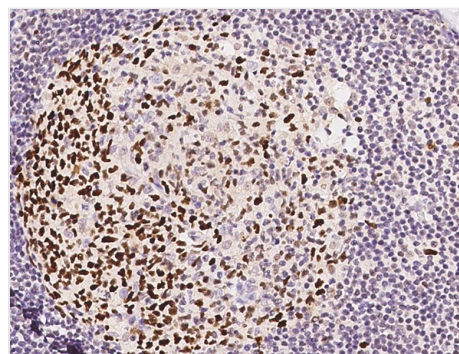
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human LIG1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; PBS, pH7.0 with 0.03% Proclin300
Applicable Applications for anti-LIG1 antibody	IHC (Immunohistochemistry)
Immunogen	E Coli-derived Human LIG1 fragment
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with E Coli-derived Human LIG1 fragment, and purified by antigen affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles.

IMAGES


IHC (Immunohistochemistry)

Immunochemical staining of human LIG1 in human duodenum with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.


IHC (Immunohistochemistry)

Immunochemical staining of human LIG1 in human lymph node with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for anti-LIG1 antibody	DNA ligases catalyze the joining of DNA strands to complete DNA replication, recombination and repair transactions. To protect the integrity of the genome, DNA ligase 1 (LIG1) discriminates against DNA junctions harboring mutagenic 3'-DNA mismatches or oxidative DNA damage. LIG1 is established as the replicative ligase, completing ligation of the >50 million ligation events during DNA replication in addition to ligation events during DNA repair. LIG1 is essential for embryonic development and LIG1 mutants are linked to immunodeficiencies. LIG1 discriminates against 3-mismatches and DNA damage, including oxidative DNA damage incorporated by DNA polymerases. Discrimination by DNA ligases can impair progression of DNA repair when oxidized nucleotides (8oxo-dG, 8oxo-deoxyguanosine) are inserted by DNA repair polymerases. Moreover, the toxicity of anti-cancer MutT homolog 1 (MTH1) inhibitors that increase concentrations of oxidatively damaged nucleotide pools is hypothesized to act in part by promoting DNA repair polymerase incorporation of oxidized nucleotides and subsequent ligation by DNA ligases.
References	Tumbale PP, et al. (2019) Two-tiered enforcement of high-fidelity DNA ligation. Nat Commun 10 (1): 5431.Kori S, et al. (2019) Structure of the uhrf1 tandem tudor domain bound to a methylated non-histone protein, lig1, reveals rules for binding and regulation. Structure 27 (3): 485-496.e487.Hanzlikova H, et al. (2018) The importance of poly(adp-ribose) polymerase as a sensor of unligated okazaki fragments during DNA replication. Mol Cell 71 (2): 319-331.e313.

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/polyclonal/lig1-antibody-immunohistochemistry-elisa/256557>