

**Product Name: DNA Ligase I Rabbit Polyclonal Antibody**  
**Catalog #: APRab10047**



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## Summary

<b>Production Name</b>	DNA Ligase I Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IHC, WB, ELISA
<b>Reactivity</b>	Human, Rat, Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	LIG1
<b>Alternative Names</b>	LIG1; DNA ligase 1; DNA ligase I; Polydeoxyribonucleotide synthase [ATP] 1
<b>Gene ID</b>	3978.0
<b>SwissProt ID</b>	P18858. The antiserum was produced against synthesized peptide derived from human DNL1. AA range: 111-160

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
<b>Molecular Weight</b>	133kD

## Background

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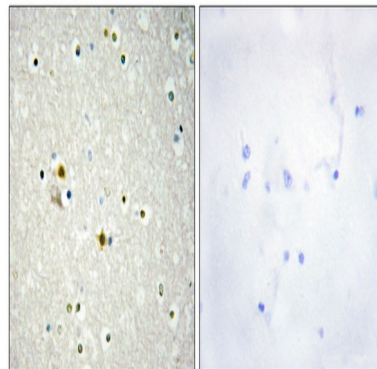


This gene encodes a member of the ATP-dependent DNA ligase protein family. The encoded protein functions in DNA replication, recombination, and the base excision repair process. Mutations in this gene that lead to DNA ligase I deficiency result in immunodeficiency and increased sensitivity to DNA-damaging agents. Disruption of this gene may also be associated with a variety of cancers. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014],catalytic activity:ATP + (deoxyribonucleotide)(n) + (deoxyribonucleotide)(m) = AMP + diphosphate + (deoxyribonucleotide)(n+m),cofactor:Magnesium.,disease:Defects in LIG1 seem to cause immunodeficiencies and cellular hypersensitivity to DNA-damaging agents.,function:DNA ligase that seals nicks in double-stranded DNA during DNA replication, DNA recombination and DNA repair.,online information:DNA ligase entry,online information:LIG1 mutation db,similarity:Belongs to the ATP-dependent DNA ligase family.,

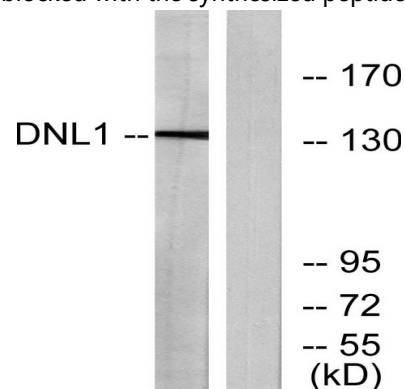
## Research Area

DNA replication;Base excision repair;Nucleotide excision repair;Mismatch repair;

## Image Data

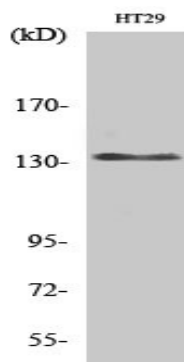


Immunohistochemistry analysis of paraffin-embedded human brain tissue, using DNL1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT-29 cells, using DNL1 Antibody. The lane on the right is blocked with the synthesized peptide.

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Western Blot analysis of various cells using DNA Ligase I Polyclonal Antibody diluted at 1: 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA) .

**Note**

For research use only.