



# DNA Ligase I Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-00378
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	LIG1
<b>Protein Name</b>	DNA ligase 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human DNL1. AA range:111-160
<b>Specificity</b>	DNA Ligase I Polyclonal Antibody detects endogenous levels of DNA Ligase I protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	LIG1; DNA ligase 1; DNA ligase I; Polydeoxyribonucleotide synthase [ATP] 1
<b>Observed Band</b>	133kD
<b>Cell Pathway</b>	Nucleus.
<b>Tissue Specificity</b>	Brain,Epithelium,Eye,PCR rescued clones,T lymphoblast,
<b>Function</b>	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.,
<b>Background</b>	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],

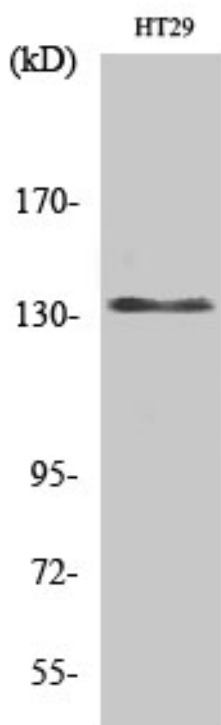
**matters needing attention**

Avoid repeated freezing and thawing!

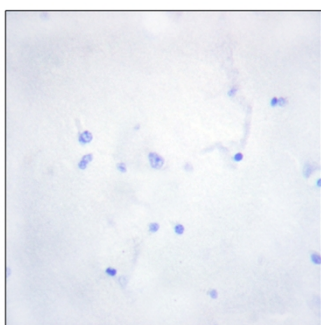
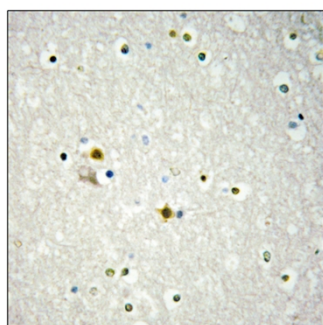
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



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, Inventbiotech, MN, USA).



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.

