

## **DNA Ligase I Polyclonal Antibody**

Catalog No: YT1364

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;IHC;IF;ELISA

Target: DNA Ligase I

**Fields:** >>DNA replication;>>Base excision repair;>>Nucleotide excision

repair;>>Mismatch repair

Gene Name: LIG1

Protein Name: DNA ligase 1

Human Gene Id: 3978

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

DNL1. AA range:111-160

Specificity: DNA Ligase I Polyclonal Antibody detects endogenous levels of DNA Ligase I

protein.

P18858

P37913

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 133kD

**Cell Pathway:** DNA replication;Base excision repair;Nucleotide excision repair;Mismatch

repair;

**Background :** 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],

**Function:** 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.,

Subcellular Location:

Nucleus.

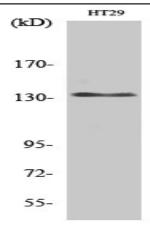
**Expression:** Brain, Epithelium, Eye, PCR rescued clones, Tlymphoblast,

**Sort**: 5168

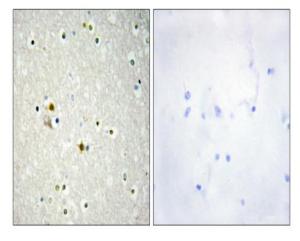
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## **Products Images**

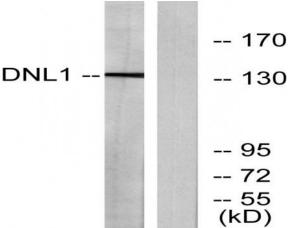
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Western Blot analysis of various cells using DNA Ligase I Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



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.