

## DNA Ligase I Polyclonal Antibody

<b>Catalog No :</b>	YT1364
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	DNA Ligase I
<b>Fields :</b>	>>DNA replication;>>Base excision repair;>>Nucleotide excision repair;>>Mismatch repair
<b>Gene Name :</b>	LIG1
<b>Protein Name :</b>	DNA ligase 1
<b>Human Gene Id :</b>	3978
<b>Human Swiss Prot No :</b>	P18858
<b>Mouse Swiss Prot No :</b>	P37913
<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>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

**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;

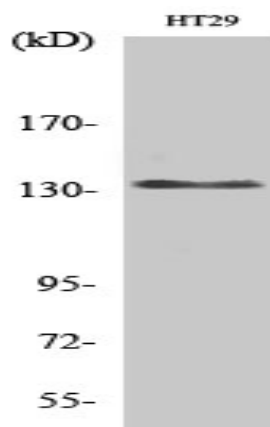
**Background :** This gene encodes a member of the ATP-dependent DNA ligase protein family. The encoded protein functions in DNA replication, recombination, and the base excision repair process. Mutations in this gene that lead to DNA ligase I deficiency result in immunodeficiency and increased sensitivity 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.,

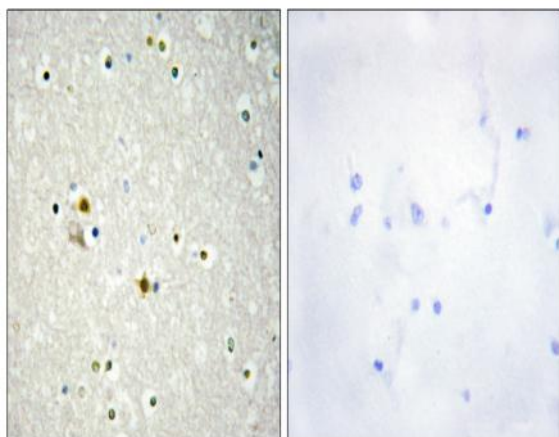
**Subcellular Location :** Nucleus.

**Expression :** Brain,Epithelium,Eye,PCR rescued clones,T lymphoblast,

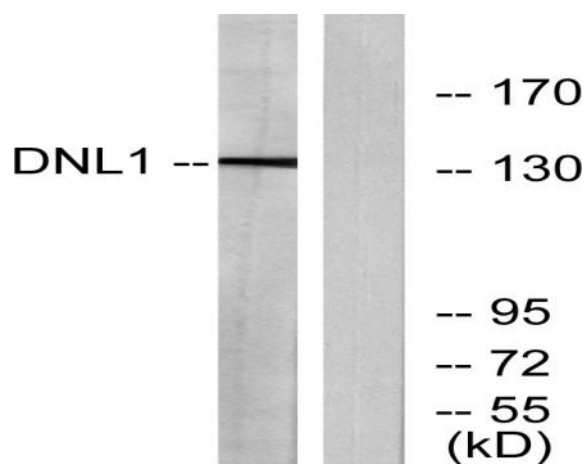
## Products Images



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.