Product Name: **DNA Ligase I Rabbit Polyclonal Antibody**
Catalog #: **APRab10047**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	133kDa

Antigen Information

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

Background

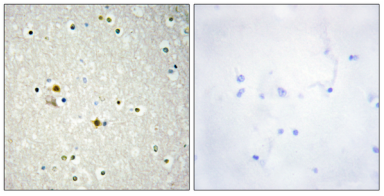
This gene encodes a member of the ATP-dependent DNA ligase protein family. The encoded protein functions in DNA

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],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.,

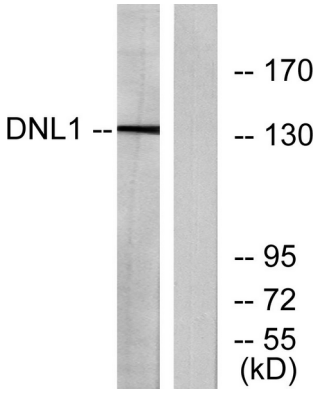
Research Area

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

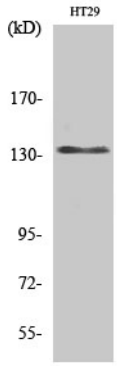
Image Data



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.



Western Blot analysis of various cells using DNA Ligase I Polyclonal Antibody diluted at 1：2000.