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**Product Name: DNA Ligase III Rabbit Polyclonal Antibody****Catalog #: APRab10048**

For research use only.

**Summary**

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

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	100kDa

**Antigen Information**

<b>Gene Name</b>	LIG3
<b>Alternative Names</b>	LIG3; DNA ligase 3; DNA ligase III; Polydeoxyribonucleotide synthase [ATP] 3
<b>Gene ID</b>	3980.0
<b>SwissProt ID</b>	P49916
<b>Immunogen</b>	Synthesized peptide derived from DNA Ligase III . at AA range: 110-190

**Background**

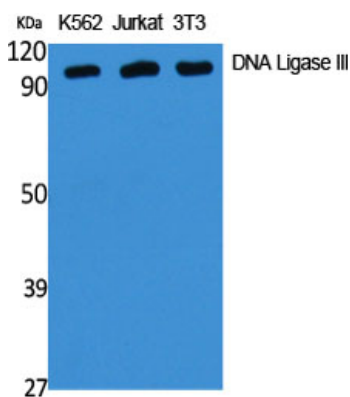
This gene is a member of the DNA ligase family. Each member of this family encodes a protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and

is located in both the mitochondria and nucleus, with translation initiation from the upstream start codon allowing for transport to the mitochondria and translation initiation from a downstream start codon allowing for transport to the nucleus. Additionally, alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008],catalytic activity:ATP + (deoxyribonucleotide)(n) + (deoxyribonucleotide)(m) = AMP + diphosphate + (deoxyribonucleotide)(n+m),cofactor:Magnesium.,function:Interacts with DNA-repair protein XRCC1 and can correct defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents.,online information:DNA ligase entry,similarity:Belongs to the ATP-dependent DNA ligase family.,similarity:Contains 1 BRCT domain.,similarity:Contains 1 PARP-type zinc finger.,tissue specificity:Testis, thymus, prostate and heart.,

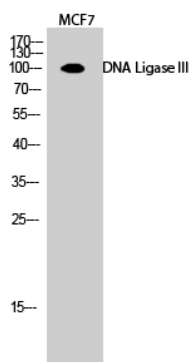
## Research Area

Base excision repair;

## Image Data



Western Blot analysis of various cells using DNA Ligase III Polyclonal Antibody diluted at 1: 1000.



Western Blot analysis of MCF7 cells using DNA Ligase III Polyclonal Antibody diluted at 1: 1000.