

## DNA Ligase III Polyclonal Antibody

<b>Catalog No :</b>	YT1365
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	DNA Ligase III
<b>Fields :</b>	>>Base excision repair
<b>Gene Name :</b>	LIG3
<b>Protein Name :</b>	DNA ligase 3
<b>Human Gene Id :</b>	3980
<b>Human Swiss Prot No :</b>	P49916
<b>Mouse Swiss Prot No :</b>	P97386
<b>Immunogen :</b>	Synthesized peptide derived from DNA Ligase III . at AA range: 110-190
<b>Specificity :</b>	DNA Ligase III Polyclonal Antibody detects endogenous levels of DNA Ligase III 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. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 100kD

**Cell Pathway :** Base excision repair;

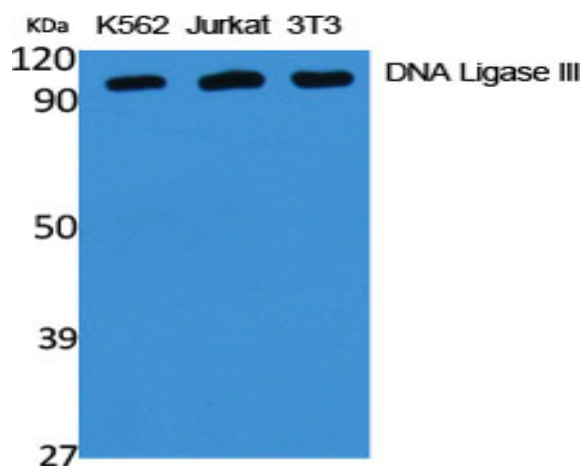
**Background :** This gene is a member of the DNA ligase family. Each member of this family encodes a protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and is located in both the mitochondria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

**Function :** 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.,

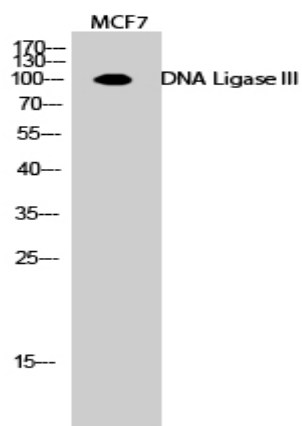
**Subcellular Location :** [Isoform 1]: Mitochondrion . Contains an N-terminal mitochondrial transit peptide. .; [Isoform 2]: Mitochondrion . Contains an N-terminal mitochondrial transit peptide. .; [Isoform 3]: Nucleus . Lacks the N-terminal mitochondrial transit peptide. .; [Isoform 4]: Nucleus . Lacks the N-terminal mitochondrial transit peptide. .

**Expression :** Testis, thymus, prostate and heart.

## Products Images



Western Blot analysis of various cells using DNA Ligase III Polyclonal Antibody diluted at 1:1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventibiotec, MN, USA).



Western Blot analysis of MCF7 cells using DNA Ligase III Polyclonal Antibody diluted at 1:1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).