

DNA Ligase III Polyclonal Antibody
Catalog # AP69548**Specification**

DNA Ligase III Polyclonal Antibody - Product Information

Application	WB
Primary Accession	P49916
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

DNA Ligase III Polyclonal Antibody - Additional Information**Gene ID** 3980**Other Names**

LIG3; DNA ligase 3; DNA ligase III; Polydeoxyribonucleotide synthase [ATP] 3

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

DNA Ligase III Polyclonal Antibody - Protein Information**Name** LIG3**Function**

Isoform 3 functions as a heterodimer with DNA-repair protein XRCC1 in the nucleus and can correct defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents. Isoform 1 is targeted to mitochondria, where it functions as a DNA ligase in mitochondrial base-excision DNA repair (PubMed:10207110, PubMed:24674627).

Cellular Location

[Isoform 1]: Mitochondrion Note=Contains an N-terminal mitochondrial transit peptide [Isoform 3]: Nucleus. Note=Lacks the N-terminal mitochondrial transit peptide.

Tissue Location

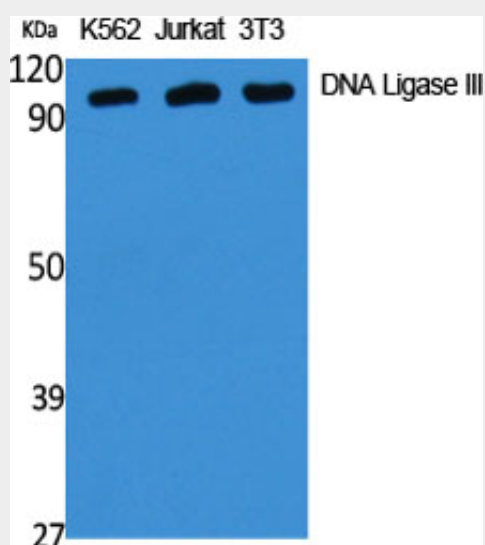
Testis, thymus, prostate and heart.

DNA Ligase III Polyclonal Antibody - Protocols

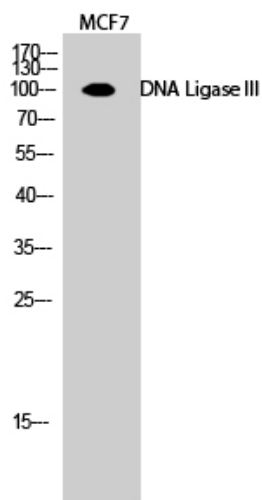
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DNA Ligase III Polyclonal Antibody - 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, Invent biotech, 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, Invent biotech, MN, USA).

DNA Ligase III Polyclonal Antibody - Background

Isoform 3 functions as heterodimer with DNA-repair protein XRCC1 in the nucleus and can correct defective DNA strand- break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents. Isoform 1 is targeted to mitochondria, where it functions as DNA ligase in mitochondrial base-excision DNA repair (PubMed:10207110, PubMed:24674627).