

DNA Ligase III Polyclonal Antibody

Catalog # AP69548

Product Information

Application	WB, E
Primary Accession	P49916
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112907

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. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

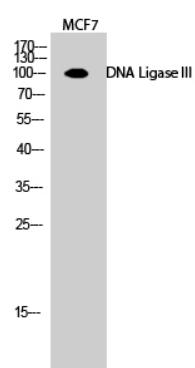
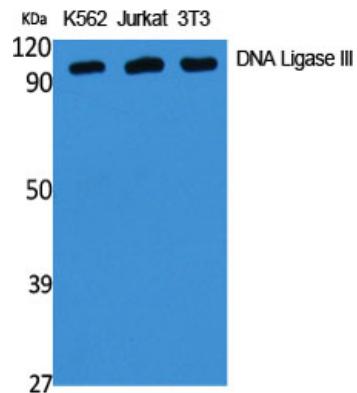
Name	LIG3
Function	Isoform 3 functions as a heterodimer with DNA-repair protein XRCC1 in the nucleus and can correct defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents. Isoform 1 is targeted to mitochondria, where it functions 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.

Background

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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](#)).

Images



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