

DNA Ligase III Polyclonal Antibody

Catalog # AP69548

Product Information

Application WB Primary Accession P49916

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW112907

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

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:<u>24674627</u>).

Cellular Location [Isoform 1]: Mitochondrion Note=Contains an N-terminal mitochondrial

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

transit peptide.

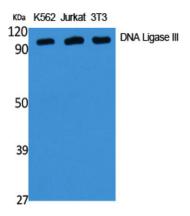
Tissue Location Testis, thymus, prostate and heart.

Background

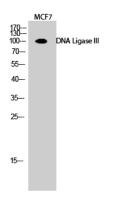
Isoform 3 functions as heterodimer with DNA-repair protein XRCC1 in the nucleus and can correct defective DNA strand- break repair and sister chromatid exchange following treatment with ionizing

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).

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,Inventbiotech,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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.