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# DNA Ligase IV Rabbit mAb

Catalog No.: A11432 Recombinant 4 Publications

# **Basic Information**

**Observed MW** 100kDa

**Calculated MW** 104kDa

Category SMab Recombinant Monoclonal Antibody

**Recommended Dilutions** 

Applications WB, ELISA

**Cross-Reactivity** Human

**CloneNo number** ARC0595

# Background

The protein encoded by this gene is a DNA ligase that joins single-strand breaks in a double-stranded polydeoxynucleotide in an ATP-dependent reaction. This protein is essential for V(D)J recombination and DNA double-strand break (DSB) repair through nonhomologous end joining (NHEJ). This protein forms a complex with the X-ray repair cross complementing protein 4 (XRCC4), and further interacts with the DNA-dependent protein kinase (DNA-PK). Both XRCC4 and DNA-PK are known to be required for NHEJ. The crystal structure of the complex formed by this protein and XRCC4 has been resolved. Defects in this gene are the cause of LIG4 syndrome. Alternatively spliced transcript variants encoding the same protein have been observed.

# **Immunogen Information**

WB	1:500 - 1:2000	Gene ID	Swiss Prot
		3981	P49917
		T	

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 504-685 of human DNA Ligase IV (P49917).

### **Synonyms**

LIG4S; DNA Ligase IV

Contac	4
Contac	τ

## **Product Information**

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Source Rabbit

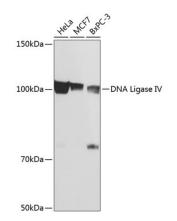
Isotype IgG

Purification Affinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Validation Data



Western blot analysis of extracts of various cell lines, using DNA Ligase IV Rabbit mAb (A11432) at 1 : 1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.