

# DNA Ligase IV Rabbit mAb

Catalog No.: A11432 **Recombinant** **5 Publications**

## Basic Information

### Observed MW

104kDa

### Calculated MW

104kDa

### Category

Primary antibody

### 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.

## Recommended Dilutions

**WB** 1:500 - 1:2000

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

3981

### Swiss Prot

P49917

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

LIG4S; DNA Ligase IV

## Contact

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## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

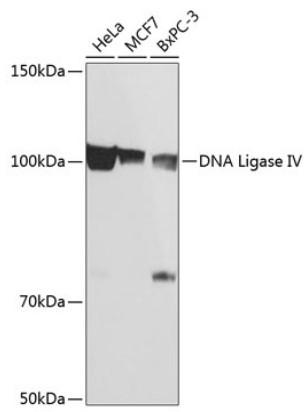
### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

## Validation Data

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Western blot analysis of various lysates using DNA Ligase IV Rabbit mAb (A11432) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated 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.