Leader in Biomolecular Solutions for Life Science

# **DNA Ligase IV Rabbit mAb**

Catalog No.: A11432 Recombinant 4 Publications



# **Basic Information**

### **Observed MW**

104kDa

#### **Calculated MW**

104kDa

### Category

SMab Recombinant Monoclonal 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**Swiss Prot
3981
P49917

### **Immunogen**

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

### **Synonyms**

LIG4S; DNA Ligase IV

# **Contact**

www.abclonal.com

### **Product Information**

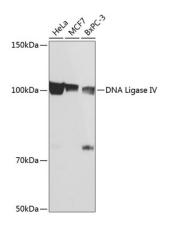
SourceIsotypePurificationRabbitIgGAffinity purification

#### 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 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.