

DNA Ligase IV Rabbit pAb

Catalog No.: A1743 **7 Publications**

Basic Information

Observed MW

110kDa

Calculated MW

104kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P

Cross-Reactivity

Human, Mouse, Rat

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 - 1:1000
IHC-P	1:50 - 1:200

Immunogen Information

Gene ID

3981

Swiss Prot

P49917

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-210 of human DNA Ligase IV (NP_002303.2).

Synonyms

LIG4S; DNA Ligase IV

Contact

 | www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

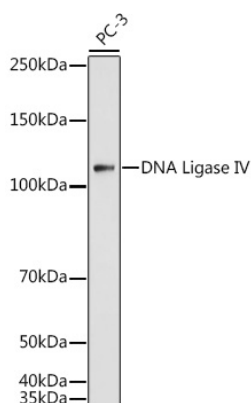
Affinity purification

Storage

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

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from PC-3 cells, using DNA Ligase IV Rabbit pAb (A1743) at 1:1000 dilution.

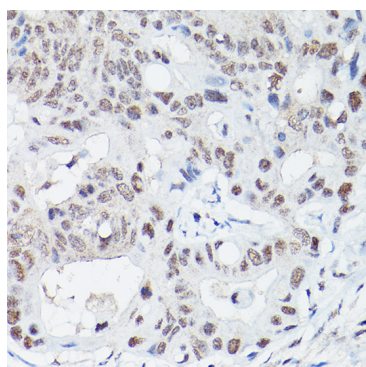
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (A5014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 180s.



Immunohistochemistry analysis of DNA Ligase IV in paraffin-embedded human colon carcinoma using DNA Ligase IV Rabbit pAb (A1743) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.