Leader in Biomolecular Solutions for Life Science

DNA Ligase IV Rabbit pAb

Catalog No.: A1743 11 Publications



Basic Information

Observed MW 110kDa

Calculated MW 104kDa

Category Primary antibody

Applications WB,IHC-P,ELISA

Cross-Reactivity Human, Mouse, Rat

Background

The protein encoded by this gene is a DNA ligase that joins single-strand breaks in a doublestranded 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
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 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

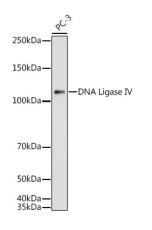
6	400-999-6126
\times	cn.market@abclonal.com.cn
€	www.abclonal.com.cn

Product Information

Source Rabbit **Isotype** IgG Purification Affinity purification

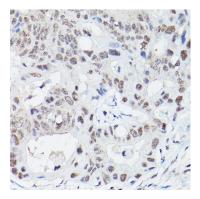
Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.09% Sodium azide,50% glycerol,pH7.3.



Western blot analysis of lysates from PC-3 cells, using DNA Ligase IV Rabbit pAb (A1743) 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: 180s.



Immunohistochemistry analysis of paraffinembedded Human colon carcinoma using DNA Ligase IV Rabbit pAb (A1743) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.