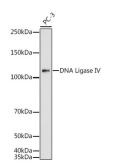
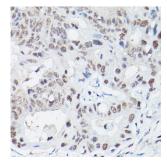


## **DNA Ligase 4 (LIG4) Antibody**

Catalogue No.:abx001451



Western blot analysis of lysates from PC-3 cells, using DNA Ligase IV Antibody at 1/1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1/10000 dilution. Lysates/proteins: 25  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 180s.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using DNA Ligase IV Antibody at dilution of 1/100 (40x lens). High pressure antigen retrieval performed in 0.01 M Citrate buffer (pH 6.0) prior to IHC staining.

LIG4 Antibody is a Rabbit Polyclonal antibody against LIG4. Two major pathways, homologous recombination (HR) and nonhomologous end joining (NHEJ), counteract one of themost toxic lesions, the DSB. The core protein complex mediating NHEJ in mammals includes DNA ligase IV (Lig4). Lig4 belongs to an ATP-dependent DNA ligase family, and joins single-strand breaks in a double-stranded polydeoxynucleotide in an ATP-dependent reaction. The complex Lig4-XRCC4 is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of Lig4.

Target: DNA Ligase 4 (LIG4)

Clonality: Polyclonal

Reactivity: Human, Mouse, Rat

Tested Applications: ELISA, WB, IHC

Host: Rabbit

Recommended dilutions: ELISA: 1 µg/ml, WB: 1/500 - 1/1000, IHC-P: 1/50 - 1/200. Not tested in IHC-F. Optimal

dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

**Immunogen:** Recombinant protein corresponding to LIG4. The exact sequence is proprietary.

Isotype: IgG

## **Datasheet**

Version: 6.0.0 Revision date: 28 Jul 2025



Form: Liquid

**Purification:** Purified by affinity chromatography.

**Storage:** Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: P49917 (<u>UniProt</u>, <u>ExPASy</u>)

Gene Symbol: LIG4

GeneID: <u>3981</u>

NCBI Accession: NP\_002303.2

KEGG: hsa:3981

String: <u>9606.ENSP00000484288</u>

Molecular Weight: Calculated MW: 104 kDa

Observed MW: 110 kDa

**Buffer:** PBS, pH 7.3, containing 0.09% sodium azide, 50% glycerol.

**Concentration:** > 0.2 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC,

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.