

For Research Use Only

LIG4 Polyclonal antibody

Catalog Number: 12695-1-AP

Featured Product

22 Publications



Basic Information

| | | |
|---|--|--|
| Catalog Number: 12695-1-AP | GenBank Accession Number: BC037491 | Purification Method: Antigen affinity purification |
| Size: 150ul , Concentration: 600 µg/ml by Nanodrop; | GeneID (NCBI): 3981 | Recommended Dilutions: WB 1:500-1:1000 IHC 1:20-1:200 |
| Source: Rabbit | Full Name: Ligase IV, DNA, ATP-dependent | |
| Isotype: IgG | Calculated MW: 911 aa, 104 kDa | |
| Immunogen Catalog Number: AG3385 | Observed MW: 100-104 kDa | |

Applications

Tested Applications:
IHC, WB, ELISA

Cited Applications:
IF, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: mouse testis tissue, mouse liver tissue, HepG2 cells, HeLa cells, rat testis tissue

IHC: human prostate cancer tissue, human testis tissue

Background Information

Two major pathways, homologous recombination (HR) and nonhomologous end joining (NHEJ), counteract one of the most 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.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|----------------|-----------|---------------------|-------------|
| Liyang He | 36220889 | Cell Death Differ | WB |
| Hong-Yu Tao | 36435475 | Int J Biol Macromol | WB |
| Cousin Wendy W | 23704914 | PLoS One | WB |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

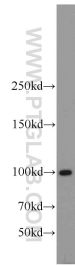
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

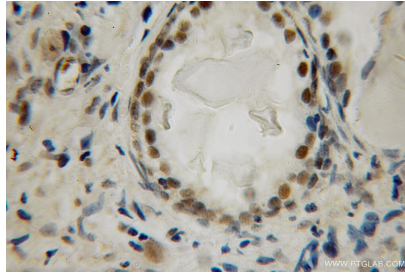
E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



mouse testis tissue were subjected to SDS PAGE followed by western blot with 12695-1-AP (LIG4 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer using 12695-1-AP (LIG4 antibody) at dilution of 1:100 (under 10x lens).