For Research Use Only

LIG4 Polyclonal antibody

Catalog Number:12695-1-AP Featured Product 22 Publications

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Basic Information

Catalog Number:
12695-1-AP

Size:
150ul , Concentration: 600 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3385

GenBank Accession Number:
BC037491

GeneID (NCBI):
3981

UNIPROT ID:
P49917

Full Name:
ligase IV, DNA, ATP-dependent

Calculated MW:
911 aa, 104 kDa

Observed MW:
100-104 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:20-1:200

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IF

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 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 brdownloadeaks 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
Liying He	36220889	Cell Death Differ	WB
Hong-Yu Tao	36435475	Int J Biol Macromol	WB
Cousin Wendy W	23704914	PLoS One	WB

Storage

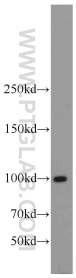
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

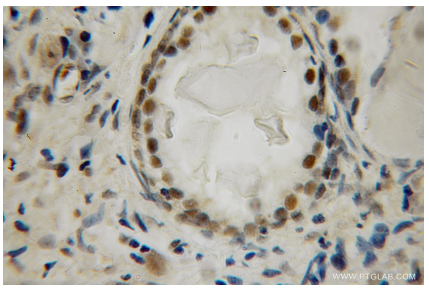
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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).