

LIG4 Monoclonal antibody

Catalog Number: 66705-1-Ig

Basic Information

Catalog Number: 66705-1-Ig	GenBank Accession Number: BC037491	Purification Method: Protein G purification
Size: 1000 µg/ml	GeneID (NCBI): 3981	CloneNo.: 1H6C11
Source: Mouse	UNIPROT ID: P49917	Recommended Dilutions: WB 1:1000-1:4000 IF/ICC 1:50-1:500
Isotype: IgG2a	Full Name: ligase IV, DNA, ATP-dependent	
Immunogen Catalog Number: AG3385	Calculated MW: 911 aa, 104 kDa	
	Observed MW: 100-104 kDa	

Applications

Tested Applications: IF/ICC, WB, ELISA	Positive Controls:
Species Specificity: Human	WB : PC-3 cells, HeLa cells, HepG2 cells, Jurkat cells, Ramos cells, human testis tissue
	IF/ICC : HepG2 cells,

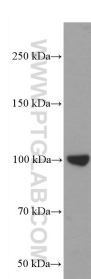
Background Information

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.

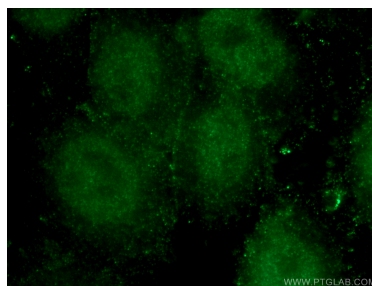
Storage

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

Selected Validation Data



PC-3 cells were subjected to SDS PAGE followed by western blot with 66705-1-Ig (LIG4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66705-1-Ig (LIG4 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).