

For Research Use Only

# LIG3 Polyclonal antibody

Catalog Number: 26583-1-AP **6 Publications**



## Basic Information

<b>Catalog Number:</b> 26583-1-AP	<b>GenBank Accession Number:</b> BC068005	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 900 µg/ml by Nanodrop and 500 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 3980	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IF 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P49916	
<b>Isotype:</b> IgG	<b>Full Name:</b> ligase III, DNA, ATP-dependent	
<b>Immunogen Catalog Number:</b> AG24998	<b>Calculated MW:</b> 100-110 kDa	
	<b>Observed MW:</b> 100 kDa	

## Applications

<b>Tested Applications:</b> WB, IP, IF, ELISA	<b>Positive Controls:</b> WB : HEK-293T cells, HeLa cells, PC-3 cells IP : HEK-293T cells, IF : HeLa cells,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> human, pig	

## Background Information

DNA ligase 3 is an enzyme that in humans is encoded by the LIG3 gene. The human LIG3 gene encodes ATP-dependent DNA ligases that seal interruptions in the phosphodiester backbone of duplex DNA. There are three families of ATP-dependent DNA ligases in eukaryotes. These enzymes utilize the same three step reaction mechanism; 1 formation of a covalent enzyme-adenylate intermediate; 2 transfer of the adenylate group to the 5' phosphate terminus of a DNA nick; 3 phosphodiester bond formation. Unlike LIG1 and LIG4 family members that are found in almost all eukaryotes, LIG3 family members are less widely distributed. The LIG3 gene encodes several distinct DNA ligase species by alternative translation initiation and alternative splicing mechanisms

## Notable Publications

Author	Pubmed ID	Journal	Application
Guoling Li	32534122	Int J Biochem Cell Biol	WB
Elena Bonora	33855352	Brain	IF
Gergely Rona	38458201	Mol Cell	WB

## Storage

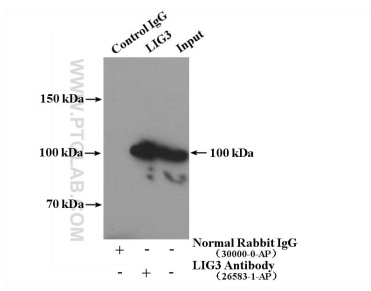
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

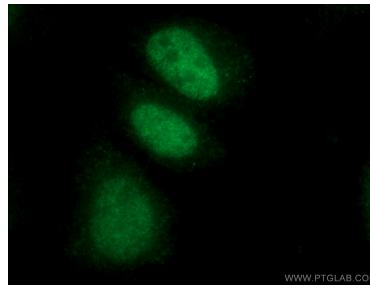
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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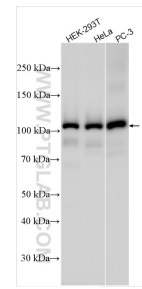
## Selected Validation Data



IP result of anti-LIG3 (IP:26583-1-AP, 4 $\mu$ g; Detection:26583-1-AP 1:300) with HEK-293T cells lysate 4000 $\mu$ g.



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 26583-1-AP (LIG3 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 26583-1-AP (LIG3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.