

For Research Use Only

DNA ligase III/LIG3 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 68810-1-PBS



Basic Information

Catalog Number: 68810-1-PBS	GenBank Accession Number: BC068005	Purification Method: Protein G purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 3980	CloneNo.: 1B10B3
Source: Mouse	UNIPROT ID: P49916	
Isotype: IgG1	Full Name: ligase III, DNA, ATP-dependent	
Immunogen Catalog Number: AG31484	Calculated MW: 100-110 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications:
WB, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

68810-1-PBS targets DNA ligase III/LIG3 as part of a matched antibody pair:

MP50683-2: 68810-1-PBS capture and 68810-3-PBS detection (validated in Cytometric bead array)

MP50683-3: 68810-1-PBS capture and 68810-2-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

DNA ligase III (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.

Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

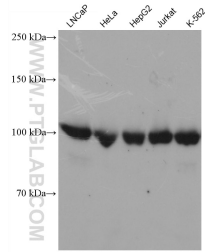
For technical support and original validation data for this product please contact:

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

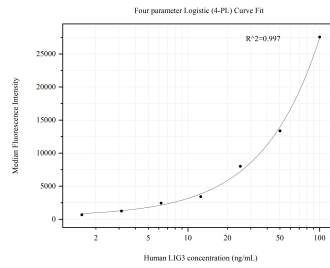
E: proteintech@ptglab.com
W: ptglab.com

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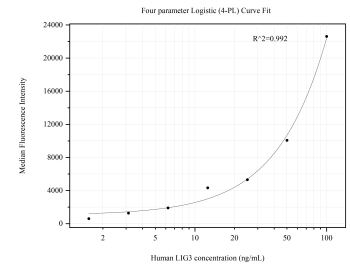
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68810-1-Ig (DNA ligase III/LIG3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68810-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50683-2, DNA Ligase III/LIG3 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68810-1-PBS. Detection antibody: 68810-3-PBS. Standard: Ag31484. Range: 1.563-100 ng/mL.



Cytometric bead array standard curve of MP50683-3, DNA ligase III/LIG3 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68810-1-PBS. Detection antibody: 68810-2-PBS. Standard: Ag31484. Range: 1.563-100 ng/mL.