## For Research Use Only

## DNA ligase III/LIG3 Monoclonal antibody

Catalog Number: 68810-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

68810-1-lg BC068005 GeneID (NCBI):

150ul, Concentration: 1000 ug/ml by 3980 Nanodrop: **UNIPROT ID:** P49916

Mouse Full Name: Isotype: ligase III, DNA, ATP-dependent

lgG1 Calculated MW: Immunogen Catalog Number: 100-110 kDa AG31484 Observed MW:

100 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Species Specificity: human, mouse, rat

**Positive Controls:** 

WB: LNCaP cells, HSC-T6 cells, HeLa cells, HepG2 cells,

**Purification Method:** 

Protein G purification

Recommended Dilutions:

WB 1:2000-1:10000

CloneNo.:

1B10B3

Jurkat cells, K-562 cells

## **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 -20°C. Stable for one year after shipment.

Storage Buffer:

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

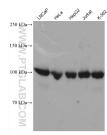
Aliquoting is unnecessary for -20°C storage

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

in USA), or 1(312) 455-8498 (outside USA)

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68810-1-lg (DNA ligase III/LIG3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.