For Research Use Only

DNA ligase III/LIG3 Monoclonal antibody

Catalog Number: 68810-1-lg



Basic Information

Catalog Number: GenBank Accession Number: 68810-1-lg BC068005

 Size:
 GeneID (NCBI):

 1000 ug/ml
 3980

 Source:
 UNIPROT ID:

 Mouse
 P49916

 Isotype:
 Full Name:

IgG1 ligase III, DNA, ATP-dependent

Immunogen Catalog Number:Calculated MW:AG31484100-110 kDaObserved MW:

Observed N 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:

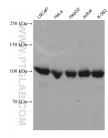
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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.