

For Research Use Only

EPM2A/Laforin Polyclonal antibody

Catalog Number:33843-1-AP



Basic Information

Catalog Number:

33843-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG36983

GenBank Accession Number:

BC070047

GeneID (NCBI):

7957

UNIPROT ID:

O95278

Full Name:

epilepsy, progressive myoclonus type 2A, Lafora disease (laforin)

Calculated MW:

37 kDa

Observed MW:

37 kDa

Purification Method:

Antigen affinity Purification

Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

Applications

Tested Applications:

WB, IP, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:

WB : HL-60 cells, Ramos cells, rat skeletal muscle tissue

IP : HL-60 cells, mouse skeletal muscle tissue

Background Information

EPM2A encodes the glucan phosphatase laforin, a type of dual specificity phosphatase, and EPM2B encodes malin, an E3-ubiquitin ligase (PMID: 22364389). Laforin is encoded by the 130 Kb four-exon gene EPM2A on chromosome 6q24 of the human genome. It is ubiquitously expressed in all tissues, although brain, skeletal muscle, heart and liver have higher levels of expression (PMID: 9931343). Laforin has also been shown to interact with other regulatory subunits of PP1, including GL and R6, members of the same family as protein targeting to glycogen (PTG) (PMID: 27702709). In the brain, laforin is expressed predominantly in cerebellum, hippocampus, frontal cortex and olfactory bulb. Laforin expression increases after birth, reaching a maximum during the adulthood (PMID: 11355878). EPM2A alternative splicing results in two laforin isoforms that are identical from amino acid 1-309, but contain a divergent C-terminal domain. Isoform laforin-331 is the most abundant form, possesses phosphatase activity, and when overexpressed in cell culture localizes to the cytoplasm and ER (PMID: 18617530).

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

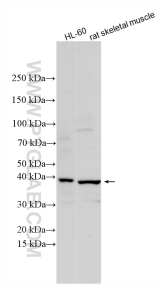
T: 4006900926

E: Proteintech-CN@ptglab.com

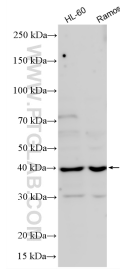
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

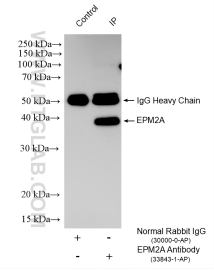
Selected Validation Data



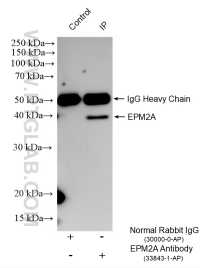
Various lysates were subjected to SDS PAGE followed by western blot with 33843-1-AP (EPM2A antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 33843-1-AP (EPM2A antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



IP result of anti-EPM2A (IP:33843-1-AP, 4ug; Detection:33843-1-AP 1:800) with mouse skeletal muscle tissue lysate 1360 ug.



IP result of anti-EPM2A (IP:33843-1-AP, 4ug; Detection:33843-1-AP 1:800) with HL-60 cells lysate 1480 ug.