

For Research Use Only

# Mouse Galc Polyclonal antibody, PBS Only

Catalog Number: 11991-1-PBS

Featured Product



## Basic Information

### Catalog Number:

11991-1-PBS

### Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3914

### GenBank Accession Number:

BC086671

### GeneID (NCBI):

14420

### UNIPROT ID:

P54818

### Full Name:

galactosylceramidase

### Calculated MW:

77 kDa

### Observed MW:

80 kDa, 30 kDa, 50 kDa

### Purification Method:

Antigen affinity purification

## Applications

### Tested Applications:

WB, IHC, IF-P, IP, Indirect ELISA

### Species Specificity:

human, mouse, rat

## Background Information

The GALC antibody targets the liposomal enzyme Galactosylceramidase (GALC), which belongs to the glycosyl hydrolase 59 family. It hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. It is primarily found in the brain and kidneys where galactolipids are hydrolyzed (PMID:8634707). Deficiencies of GALC are primarily associated with the autosomal recessive Krabbe's disease. This disease is characterized by developmental delay caused by apoptosis of myelin-forming cells. GALC is responsible for hydrolyzing galactosylceramide, a cerebroside that is an important component of myelin. A deficiency in GALC causes loss of myelin to nerve cells, resulting in delayed nerve transmissions. Krabbe's disease has varying degrees of severity due to a large number of different genetic mutations in the gene. The GALC antibody can be used to detect the deletions in the GALC gene and functions of the enzyme (PMID:20886637). Normal GALC mRNA encodes the 80 kDa precursor, which is processed into 50 and 30 kDa subunits (PMID: 26865610).

## Storage

### Storage:

Store at -80°C.

### Storage Buffer:

PBS Only

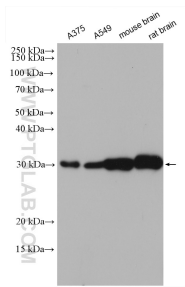
For technical support and original validation data for this product please contact:

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

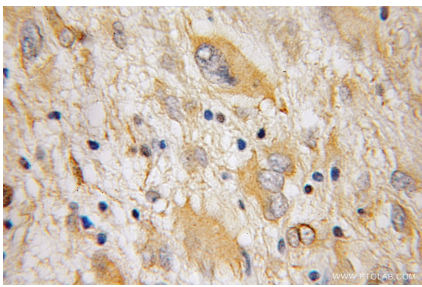
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

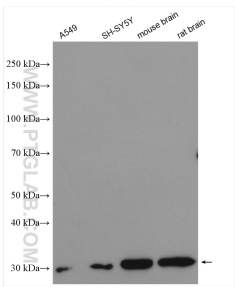
Selected Validation Data



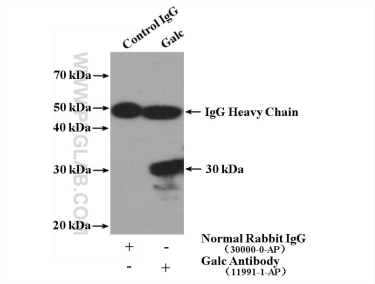
Various lysates were subjected to SDS PAGE followed by western blot with 11991-1-AP (Galc antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 11991-1-PBS in a different storage buffer formulation.



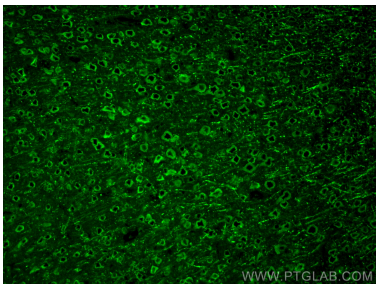
Immunohistochemical analysis of paraffin-embedded human gliomas using 11991-1-AP (Galc antibody) at dilution of 1:50 (under 10x lens). This data was developed using the same antibody clone with 11991-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 11991-1-AP (Galc antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 11991-1-PBS in a different storage buffer formulation.



IP result of anti-Galc (IP:11991-1-AP, 4ug; Detection:11991-1-AP 1:300) with NIH/3T3 cells lysate 4000ug. This data was developed using the same antibody clone with 11991-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using Galc antibody (11991-1-AP) at dilution of 1:200 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 11991-1-PBS in a different storage buffer formulation.