

For Research Use Only

# GLUD1 Polyclonal antibody

Catalog Number: 14299-1-AP

Featured Product

52 Publications



## Basic Information

### Catalog Number:

14299-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5694

### GenBank Accession Number:

BC040132

### GeneID (NCBI):

2746

### UNIPROT ID:

P00367

### Full Name:

glutamate dehydrogenase 1

### Calculated MW:

61 kDa

### Observed MW:

45-55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:50-1:500

IF-P 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HeLa cells, mouse lung tissue, HepG2 cells, L02 cells, PC-3 cells, mouse liver tissue, rat liver tissue

**IP**: HeLa cells,

**IHC**: human gliomas tissue, human breast cancer tissue, human liver tissue, mouse liver tissue

**IF-P**: mouse brain tissue,

## Background Information

Human glutamate dehydrogenase (GDH), an enzyme central to the metabolism of glutamate, is known to exist in housekeeping and nerve tissue-specific isoforms encoded by the GLUD1 and GLUD2 genes, respectively. It catalyses the reversible inter-conversion of glutamate to alpha-ketoglutarate and ammonia, thus interconnecting amino acid and carbohydrate metabolism. GLUD1 might contribute to the formation of specific synapses in the hippocampus such as those formed by the projecting neurons of the entorhinal cortex (PMID: 22138648). GLUD1 has a calculated molecular mass of 61 kDa and an apparent molecular mass of 45-55 kDa with the 53aa transit peptide removed.

## Notable Publications

Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Weiwei Dai	36256480	J Clin Invest	WB
Jessica B Spinelli	29025995	Science	

## 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

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

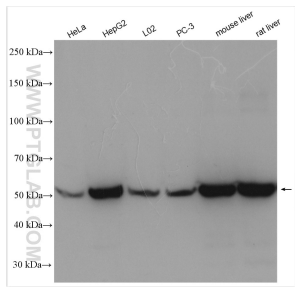
For technical support and original validation data for this product please contact:

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

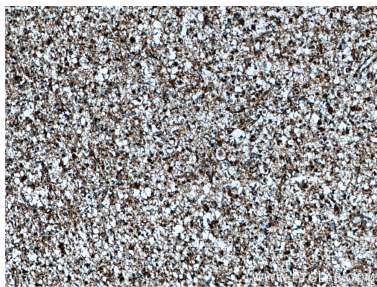
E: proteintech@ptglab.com  
W: ptglab.com

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

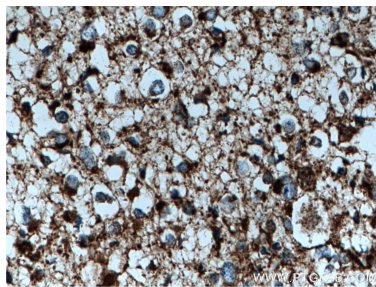
Selected Validation Data



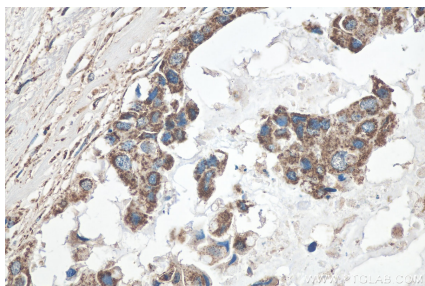
Various lysates were subjected to SDS PAGE followed by western blot with 14299-1-AP (GLUD1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



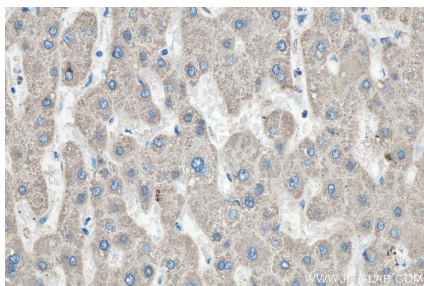
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 14299-1-AP (GLUD1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



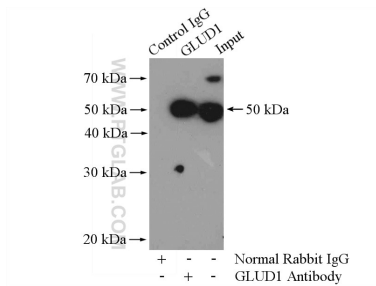
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 14299-1-AP (GLUD1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



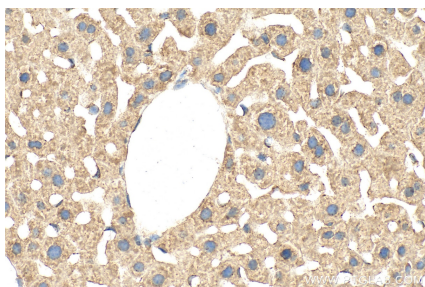
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14299-1-AP (GLUD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



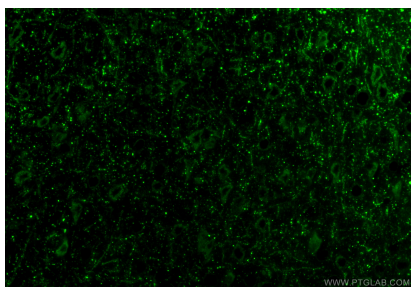
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 14299-1-AP (GLUD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-GLUD1 (IP:14299-1-AP, 4ug; Detection:14299-1-AP 1:1000) with HeLa cells lysate 2000ug.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 14299-1-AP (GLUD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using GLUD1 antibody (14299-1-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).