

For Research Use Only

# GLUD1 Monoclonal antibody

Catalog Number: 67026-1-Ig



## Basic Information

<b>Catalog Number:</b> 67026-1-Ig	<b>GenBank Accession Number:</b> BC040132	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 2000 µg/ml	<b>GeneID (NCBI):</b> 2746	<b>CloneNo.:</b> 4G10D3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P00367	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:200-1:800
<b>Isotype:</b> IgG2b	<b>Full Name:</b> glutamate dehydrogenase 1	
<b>Immunogen Catalog Number:</b> AG6179	<b>Calculated MW:</b> 61 kDa	
	<b>Observed MW:</b> 45-55 kDa	

## Applications

### Tested Applications:

IF-P, IHC, WB, ELISA

### Species Specificity:

Human, Mouse, Rat

**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, HepG2 cells, L02 cells, HuH-7 cells, HSC-T6 cells, NIH/3T3 cells

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

**IF:** human liver cancer 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.

## Storage

### Storage:

Store at -20°C.

### Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

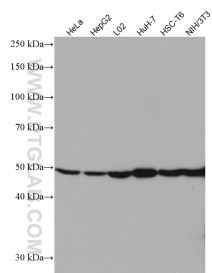
T: 4006900926

E: Proteintech-CN@ptglab.com

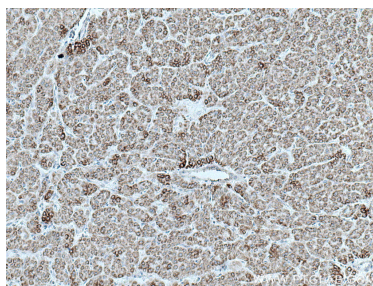
W: ptgcn.com

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

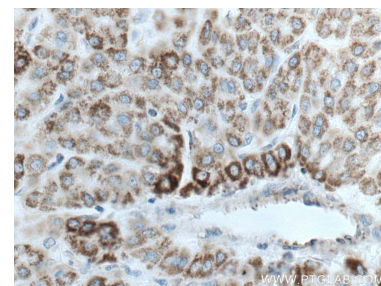
## Selected Validation Data



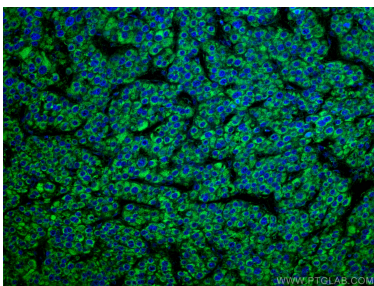
Various lysates were subjected to SDS PAGE followed by western blot with 67026-1-Ig (GLUD1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



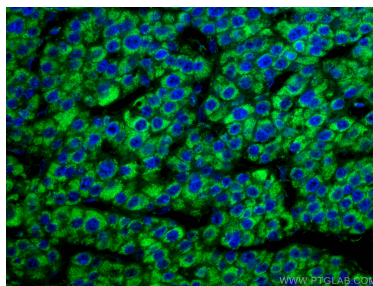
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67026-1-Ig (GLUD1 antibody) at dilution of 1:1000 (under 10x lens) proteolytic pre-treatment mediated antigen retrieved with Tris-EDTA buffer (pH9).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67026-1-Ig (GLUD1 antibody) at dilution of 1:1000 (under 40x lens) proteolytic pre-treatment mediated antigen retrieved with Tris-EDTA buffer (pH9).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using GLUD1 antibody (67026-1-Ig, Clone: 4G10D3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using GLUD1 antibody (67026-1-Ig, Clone: 4G10D3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).