For Research Use Only

GLUD1 Monoclonal antibody

Catalog Number:67026-1-lg 3 Publications



Basic Information

Catalog Number: GenBank Accession Number: 67026-1-lg BC040132
Concentration: GeneID (NCBI): 2746
Source: UNIPROT ID: P00367

Isotype:Full Name:IgG2bglutamate dehydrogenase 1

Immunogen Catalog Number: Calculated MW: AG6179 61 kDa

Observed MW: 45-55 kDa Purification Method:

4G10D3

Protein A purification CloneNo.:

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF-P 1:200-1:800

Applications

Tested Applications: WB, IHC, IF-P, ELISA Cited Applications: WB. IF

Species Specificity: human, mouse, rat Cited Species: human, mouse

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, LO2 cells, HuH-7 cells,

HSC-T6 cells, NIH/3T3 cells

IHC: human liver cancer tissue, human breast cancer

tissue

IF-P: human liver cancer tissue, mouse liver 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
Chuan-Yi Zuo	39899130	Inflammation	WB
Qifan Hu	39144257	Cell Insight	WB,IF
PamelaSara E Head	35613279	Sci Transl Med	WB

Storage

Storage:

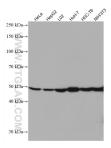
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

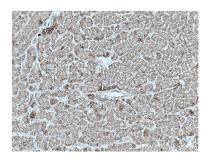
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

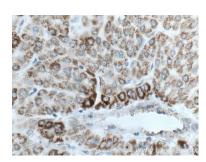
Selected Validation Data



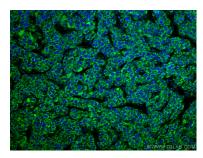
Various lysates were subjected to SDS PAGE followed by western blot with 67026-1-lg (GLUD1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



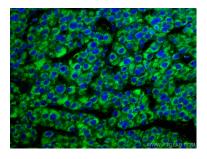
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67026-1-lg (GLUD1 antibody) at dilution of 1:1000 (under 10x lens) proteolytic pre-treatment mediated antigen retrieved with Tris-EDTA buffer (pH9).



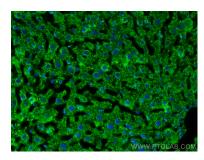
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67026-1-lg (GLUD1 antibody) at dilution of 1:1000 (under 40x lens) proteolytic pre-treatment mediated antigen retrieved with Tris-EDTA buffer (pH9).



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



Immunofluorescent analysis of (4% PFA) fixed mouse liver 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).