

GLUD1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11701b

Specification

GLUD1 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	P00367
Other Accession	P49448 , P10860 , P26443 , P00368 , P00366 , NP_005262.1 , O6P3L9 , P42174
Reactivity	Human, Mouse
Predicted	Zebrafish, Bovine, Chicken, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	438-465

GLUD1 Antibody (C-term) - Additional Information

Gene ID 2746

Other Names

Glutamate dehydrogenase 1, mitochondrial, GDH 1, GLUD1, GLUD

Target/Specificity

This GLUD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 438-465 amino acids from the C-terminal region of human GLUD1.

Dilution

WB~~1:1000
IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GLUD1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GLUD1 Antibody (C-term) - Protein Information

Name GLUD1

Synonyms GLUD

Function Mitochondrial glutamate dehydrogenase that catalyzes the conversion of L-glutamate into alpha-ketoglutarate. Plays a key role in glutamine anaplerosis by producing alpha-ketoglutarate, an important intermediate in the tricarboxylic acid cycle (PubMed:[11032875](#), PubMed:[11254391](#), PubMed:[16023112](#), PubMed:[16959573](#)). Plays a role in insulin homeostasis (PubMed:[11297618](#), PubMed:[9571255](#)). May be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate (By similarity).

Cellular Location

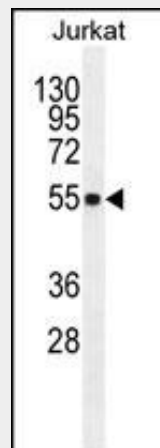
Mitochondrion. Endoplasmic reticulum. Note=Mostly translocates into the mitochondria, only a small amount of the protein localizes to the endoplasmic reticulum.

GLUD1 Antibody (C-term) - Protocols

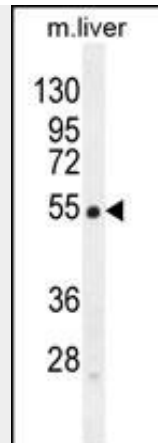
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

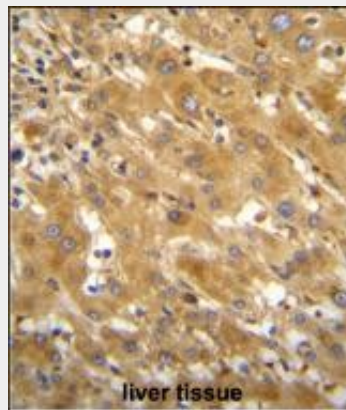
GLUD1 Antibody (C-term) - Images



GLUD1 Antibody (C-term) (Cat. #AP11701b) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the GLUD1 antibody detected the GLUD1 protein (arrow).



GLUD1 Antibody (C-term) (Cat. #AP11701b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the GLUD1 antibody detected the GLUD1 protein (arrow).



GLUD1 Antibody (C-term) (Cat. #AP11701b) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GLUD1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

GLUD1 Antibody (C-term) - Background

This gene encodes glutamate dehydrogenase protein; a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid induced insulin secretion and activating mutations in this gene are a common cause of congenital hyperinsulinism. This enzyme is allosterically activated by ADP and inhibited by GTP and ATP. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Multiple pseudogenes of this gene are present in humans.

GLUD1 Antibody (C-term) - References

- Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010)
- Jia, P., et al. Schizophr. Res. 122 (1-3), 38-42 (2010) :
- Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
- Flanagan, S.E., et al. Eur. J. Endocrinol. 162(5):987-992(2010)
- Bao, X., et al. J. Neurosci. 29(44):13929-13944(2009)

GLUD1 Antibody (C-term) - Citations

- [Antrodia cinnamomea Inhibits Migration in Human Hepatocellular Carcinoma Cells.](#)
- [NOX1 Supports the Metabolic Remodeling of HepG2 Cells.](#)