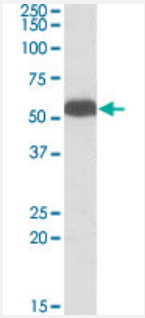
GLUD1/GLUD2 polyclonal antibody

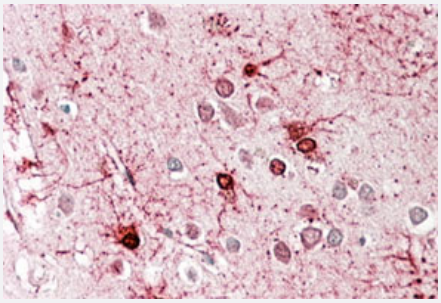
Catalog # PAB18644 Size 100 ug

Applications



Western Blot (Tissue lysate)

GLUD1/GLUD2 polyclonal antibody (Cat # PAB18644) (0.3 ug/mL) staining of mouse liver lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

GLUD1/GLUD2 polyclonal antibody (Cat # PAB18644) (3.8 ug/mL) staining of paraffin embedded human cerebral cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of GLUD1/GLUD2.
Immunogen	A synthetic peptide corresponding to internal region of human GLUD1/GLUD2.
Sequence	C-ESEEQKRNRVRGILR
Host	Goat
Theoretical MW (kDa)	55
Reactivity	Human, Mouse
Specificity	This antibody is expected to recognize both reported isoforms (NP_005262.1; NP_036216.2).

Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Recommend Usage	ELISA (1:32000) Western Blot (0.3-1 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (3-5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 0.5 mg/mL Tris saline, pH 7.3 (0.02% sodium azide, 0.5% BSA)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — GLUD1

Entrez GeneID	2746
Protein Accession#	NP_005262.1 (Gene ID : 2746);NP_036216.2 (Gene ID : 2747)
Gene Name	GLUD1
Gene Alias	GDH, GDH1, GLUD, MGC132003
Gene Description	glutamate dehydrogenase 1
Omim ID	138130 606762

Gene Ontology	Hyperlink
Gene Summary	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
Other Designations	OTTHUMP00000020018|glutamate dehydrogenase (NAD(P)+)

Gene Info — GLUD2

Entrez GeneID	2747
Protein Accession#	NP_005262.1 (Gene ID : 2746);NP_036216.2 (Gene ID : 2747)
Gene Name	GLUD2
Gene Alias	GDH2, GLUDP1
Gene Description	glutamate dehydrogenase 2
Omim ID	300144
Gene Ontology	Hyperlink
Gene Summary	Glutamate dehydrogenase (EC 1.4.1.3) catalyzes the reversible oxidative deamination of glutamate to alpha-ketoglutarate using NAD and/or NADP as cofactors. See also GLUD1 (MIM 138130).[supplied by OMIM
Other Designations	glutamate dehydrogenase pseudogene 1

Pathway

- Alanine
- Alanine
- Arginine and proline metabolism
- Arginine and proline metabolism
- Biosynthesis of alkaloids derived from ornithine
- Biosynthesis of alkaloids derived from ornithine

- D-Glutamine and D-glutamate metabolism
- D-Glutamine and D-glutamate metabolism
- Metabolic pathways
- Metabolic pathways
- Nitrogen metabolism
- Nitrogen metabolism

Disease

- Alzheimer Disease
- Cognition
- Cognition
- Genetic Predisposition to Disease
- Hyperinsulinism
- Hypoglycemia
- Parkinson Disease
- Persistent Hyperinsulinemia Hypoglycemia of Infancy
- Schizophrenia
- Schizophrenia
- Schizophrenic Psychology
- Schizophrenic Psychology
- Weight Gain
- Weight Gain