

ARG65167 anti-GLUD1 + GLUD2 antibody

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes GLUD1 + GLUD2
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Cow, Dog
Tested Application	ICC/IF, IHC-P, WB
Specificity	This antibody is expected to recognize both GLUD1 and GLUD2 proteins based on sequence homology analysis result.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	GLUD1 + GLUD2
Species	Human
Immunogen	C-ESEEQKRNRVRGILR
Conjugation	Un-conjugated
Alternate Names	GDH1; GDH 1; Glutamate dehydrogenase 1, mitochondrial; GDH; GLUD; EC 1.4.1.3; Glutamate dehydrogenase 2, mitochondrial; GLUDP1; EC 1.4.1.3; GDH 2; GDH2

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay - dependent
	IHC-P	3 - 5 µg/ml
	WB	0.3 - 1 µg/ml
Application Note	IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

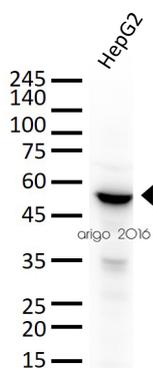
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

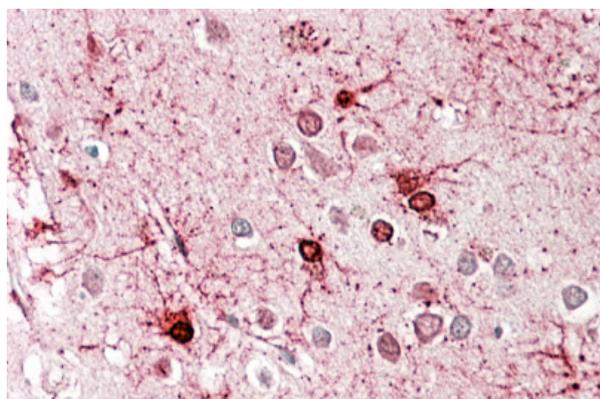
Gene Symbol	GLUD1
Gene Full Name	glutamate dehydrogenase 1
Background	This gene encodes glutamate dehydrogenase protein; a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid induced 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.[provided by RefSeq, Sep 2009]
Function	Mitochondrial glutamate dehydrogenase that converts L-glutamate into alpha-ketoglutarate. Plays a key role in glutamine anaplerosis by producing alpha-ketoglutarate, an important intermediate in the tricarboxylic acid cycle. May be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate (By similarity). [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	61 kDa
PTM	ADP-ribosylated by SIRT4, leading to inactivate glutamate dehydrogenase activity (By similarity). Stoichiometry shows that ADP-ribosylation occurs in one subunit per catalytically active homohexamer.

Images



ARG65167 anti-GLUD1 + GLUD2 antibody WB image

Western blot: 30 µg of HepG2 cell lysate stained with ARG65167 anti-GLUD1 + GLUD2 antibody at 1:500 dilution.



ARG65167 anti-GLUD1 + GLUD2 antibody IHC-P image

Immunohistochemistry: paraffin embedded Human Cerebral Cortex. (Steamed antigen retrieval with citrate buffer pH 6) stained with ARG65167 anti-GLUD1 + GLUD2 antibody at 3.8 µg/ml dilution followed by AP-staining.