

Gria1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI11298

Product Information

Application	WB
Primary Accession	<u>P23818</u>
Other Accession	<u>NM_001113325</u> , <u>NP_001106796</u>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101569

Additional Information

Gene ID	14799
Alias Symbol	2900051M01Rik, AI853806, Glr-1, Glr1, GluR-A, GluRA, Glur-1, Glur1, HIPA1, GluA1, gluR-K1
Other Names	Glutamate receptor 1, GluR-1, AMPA-selective glutamate receptor 1, GluR-A, GluR-K1, Glutamate receptor ionotropic, AMPA 1, GluA1, Gria1, Glur1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Gria1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Gria1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Gria1 {ECO:0000312 MGI:MGI:95808}
Function	Ionotropic glutamate receptor that functions as a ligand- gated cation channel, gated by L-glutamate and glutamatergic agonists such as alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA), quisqualic acid, and kainic acid (PubMed: <u>1699805</u>). L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse upon entry of monovalent and divalent cations such as sodium and calcium. The receptor then desensitizes

	rapidly and enters in a transient inactive state, characterized by the presence of bound agonist. In the presence of CACNG2 or CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L-glutamate. Calcium (Ca(2+)) permeability depends on subunits composition and, heteromeric channels containing edited GRIA2 subunit are calcium-impermeable. Also permeable to other divalents cations such as strontium(2+) and magnesium(2+) and monovalent cations such as potassium(1+) and lithium(1+) (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane {ECO:000250 UniProtKB:P19490}; Multi-pass membrane protein {ECO:000250 UniProtKB:P19490}. Postsynaptic cell membrane; Multi-pass membrane protein. Postsynaptic density membrane; Multi-pass membrane protein. Cell projection, dendrite Cell projection, dendritic spine. Early endosome membrane {ECO:0000250 UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19490}. Recycling endosome membrane {ECO:0000250 UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19490}. Presynapse. Synapse Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. Colocalizes with PDLIM4 in early endosomes. Displays a somatodendritic localization and is excluded from axons in neurons (PubMed:18341993). Localized to cone photoreceptor pedicles (PubMed:28334377). {ECO:000250 UniProtKB:P19490, ECO:0000269 PubMed:18341993, ECO:0000269 PubMed:28334377}
Tissue Location	Expressed in the outer plexiform layer of the retina of the eye (at protein level) (PubMed:28334377). Expressed in the forebrain and hippocampus (at protein level) (PubMed:31651360)

Images



WB Suggested Anti-Gria1 Antibody Titration: 1.0 µg/ml Positive Control: Mouse Pancreas

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.