

Anti-GRIA3 Antibody
Catalog # ABO11559**Specification**

Anti-GRIA3 Antibody - Product Information

Application	WB
Primary Accession	P42263
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Glutamate receptor 3(GRIA3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GRIA3 Antibody - Additional Information

Gene ID 2892

Other Names

Glutamate receptor 3, GluR-3, AMPA-selective glutamate receptor 3, GluR-C, GluR-K3, Glutamate receptor ionotropic, AMPA 3, GluA3, GRIA3, GLUR3, GLURC

Calculated MW

101157 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Interaction with CNIH2 and CNIH3 promotes cell surface expression.

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Protein Name

Glutamate receptor 3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human GRIA3 (394-412aa RKAGYWNEYERFVPFSDQQ), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA3 subfamily.

Anti-GRIA3 Antibody - Protein Information

Name GRIA3 ([HGNC:4573](#))

Synonyms GluA3, GLUR3, GLURC

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 (By similarity). L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system and plays an important role in fast excitatory synaptic transmission by inducing long-term potentiation (By similarity). 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 calcium (PubMed: [17989220](http://www.uniprot.org/citations/17989220)). The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist (PubMed: [17989220](http://www.uniprot.org/citations/17989220)). In the presence of CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate (PubMed: [21172611](http://www.uniprot.org/citations/21172611)).

Cellular Location

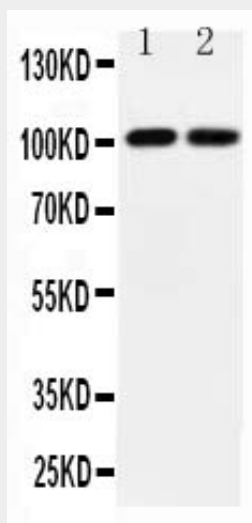
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P19492} Postsynaptic cell membrane {ECO:0000250|UniProtKB:P19492}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P19492}. Postsynaptic density membrane {ECO:0000250|UniProtKB:P19492}

Anti-GRIA3 Antibody - 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](#)

Anti-GRIA3 Antibody - Images



Anti-GRIA3 antibody, ABO11559, All Western blottingAll lanes: Anti-GRIA3 (ABO11559) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 40ugLane 2: Mouse Brain Tissue Lysate at 40ugPredicted bind size: 101KDObserved bind size: 101KD

Anti-GRIA3 Antibody - Background

Glutamate receptor 3 is a protein that in humans is encoded by the GRIA3 gene. This gene belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate(AMPA) receptors. It is mapped to Xq25. Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. In addition to that, GRIA3 has been shown to interact with GRIP1 and PICK1.