

Anti-GRIA3 Picoband Antibody

Catalog # ABO11897

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.

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
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. .
Source	Eukaryota
Protein Name	Glutamate receptor 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human GRIA3 recombinant protein (Position: G29-M360). Human GRIA3 shares 99% amino acid (aa) sequence identity with both mouse and rat GRIA3.
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

Sequence Similarities

freezing and thawing.

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

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). The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist (PubMed: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).
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}

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.

Images



Anti- GRIA3 antibody, ABO11897, Western blotting
All lanes: Anti GRIA3 (ABO11897) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Mouse Brain Tissue Lysate at 50ug
Predicted bind size: 101KD
Observed bind size: 101KD

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