

Anti-GRIA4 Picoband Antibody

Catalog # ABO11898

Product Information

Application	WB
Primary Accession	P48058
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Glutamate receptor 4(GRIA4) 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	2893
Other Names	Glutamate receptor 4, GluR-4, GluR4, AMPA-selective glutamate receptor 4, GluR-D, Glutamate receptor ionotropic, AMPA 4, GluA4, GRIA4, GLUR4
Calculated MW	100871
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. Cell projection, dendrite. Interaction with CNIH2, CNIH3 and PRKCG promotes cell surface expression. .
Source	Eukaryota
Protein Name	Glutamate receptor 4
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E.coli-derived human GRIA4 recombinant protein (Position: Q176-K350). Human GRIA4 shares 99% amino acid (aa) sequence identity with both mouse and rat GRIA4.
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.

Protein Information

Name	GRIA4 {ECO:0000303 PubMed:29220673, ECO:0000312 HGNC:HGNC:4574}
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 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 monovalent and divalent cations such as sodium and calcium. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist (By similarity). In the presence of CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L-glutamate (PubMed:21172611).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:P19493}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19493} Postsynaptic cell membrane {ECO:0000250 UniProtKB:P19493}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19493}. Cell projection, dendrite {ECO:0000250 UniProtKB:P19493}. Postsynaptic cell membrane {ECO:0000250 UniProtKB:P42262}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P42262}

Background

Glutamate receptor 4 also named GRIA4 or GLUR4, is a protein that in humans is encoded by the GRIA4 gene. It is mapped to 11q22.3. This gene is a member of a family of L-glutamate-gated ion channels that mediate fast synaptic excitatory neurotransmission. These channels are also responsive to the glutamate agonist, alpha-amino-3-hydroxy-5-methyl-4-isoxazolpropionate (AMPA). Some haplotypes of this gene show a positive association with schizophrenia. What's more, 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 composed of multiple subunits, arranged to form ligand-gated ion channels.

Images



Anti- GRIA4 antibody, ABO11898, Western blottingAll lanes: Anti GRIA4 (ABO11898) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 101KDObserved bind size: 101KD

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