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Anti-GRIA4 Picoband Antibody

Catalog # ABO11898

Specification

Anti-GRIA4 Picoband Antibody - 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.

Anti-GRIA4 Picoband Antibody - 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 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. Cell projection, dendrite. Interaction with CNIH2, CNIH3 and PRKCG promotes cell surface expression. .

Protein Name
Glutamate receptor 4

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

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 r˚Constitution, 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.**

Anti-GRIA4 Picoband Antibody - 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}

Anti-GRIA4 Picoband 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 Cytomety
- Cell Culture

Anti-GRIA4 Picoband Antibody - Images

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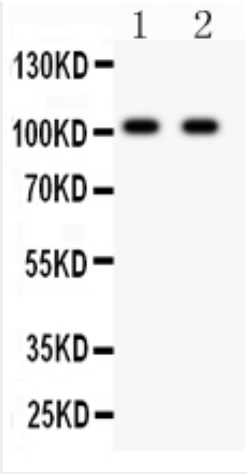

Anti- GRIA4 antibody, ABO11898, Western blottingAll lanes: Anti GRIA4 (ABO11898) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 101KDObserved bind size: 101KD

Anti-GRIA4 Picoband Antibody - 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.