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Anti-GRIA2 Picoband Antibody

Catalog # ABO11896

Product Information

Application	WB, IHC-P
Primary Accession	P42262
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Glutamate receptor 2(GRIA2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2891
Other Names	Glutamate receptor 2, GluR-2, AMPA-selective glutamate receptor 2, GluR-B, GluR-K2, Glutamate receptor ionotropic, AMPA 2, GluA2, GRIA2, GLUR2
Calculated MW	98821
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 □g/ml, Mouse, Rat, Human
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Endoplasmic reticulum membrane ; Multi-pass membrane protein . Cell junction, synapse, postsynaptic cell membrane ; Multi-pass membrane protein . Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. .
Source	Eukaryota
Protein Name	Glutamate receptor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human GRIA2 recombinant protein (Position: N25-I360). Human GRIA2 shares 99% amino acid (aa) sequence identity with both mouse and rat GRIA2.
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.

Protein Information

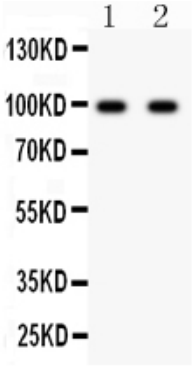
Name	GRIA2 (HGNC:4572)
Function	Ionotropic glutamate receptor that functions as a ligand- gated cation channel, gated by L-glutamate and glutamatergic agonists such as alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA), quisqualic acid, and kainic acid (PubMed:20614889, PubMed:31300657, PubMed:8003671). 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 (PubMed:14687553). 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 (PubMed:20614889, PubMed:8003671). The receptor then desensitizes rapidly and enters in a transient inactive state, characterized by the presence of bound agonist (By similarity). In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L-glutamate (By similarity). Through complex formation with NSG1, GRIP1 and STX12 controls the intracellular fate of AMPAR and the endosomal sorting of the GRIA2 subunit toward recycling and membrane targeting (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Postsynaptic density membrane {ECO:0000250|UniProtKB:P23819}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P23819}. Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression (By similarity). Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). {ECO:0000250|UniProtKB:P19491, ECO:0000250|UniProtKB:P23819}

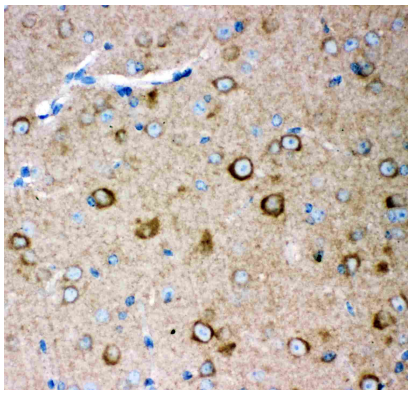
Background

Glutamate receptor 2, also known as GLUR2, is a protein that in humans is encoded by the GRIA2 gene. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. GLUR2's cytogenetic location is 4q32.1. The crystal structures of the GLUR2 ligand-binding core in the apo state and in the presence of the antagonist DNQX, the partial agonist kainate, and the full agonists AMPA and glutamate.GLUR2 plays a major role in depression at synapses in which glutamate remains in the synaptic cleft for prolonged periods of time during normal operation of the synapse. The overexpression of GLUR2 increases dendritic spine size and density in hippocampal neurons, and more remarkably, induces spine formation in GABA-releasing interneurons that normally lack spines.

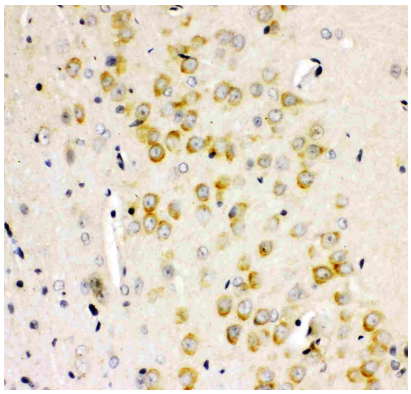
Images

Anti- GRIA2 antibody, ABO11896, Western blottingAll lanes: Anti GRIA2 (ABO11896) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 99KDObserved bind size: 99KD





Anti- GRIA2 antibody, ABO11896, IHC(P)IHC(P): Mouse Brain Tissue



Anti- GRIA2 antibody, ABO11896, IHC(P)IHC(P): Rat Brain Tissue

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