

Ionotropic Glutamate Receptor 2 Rabbit mAb

Catalog # AP76825

Product Information

ApplicationWB, IHC-P, IPPrimary AccessionP42262ReactivityHuman, RatHostRabbit

Clonality Monoclonal Antibody

Calculated MW 98821

Additional Information

Gene ID 2891

Other Names GRIA2

Dilution WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A

Format Liquid

Protein Information

Name GRIA2 (<u>HGNC:4572</u>)

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

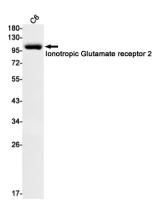
and membrane targeting (By similarity).

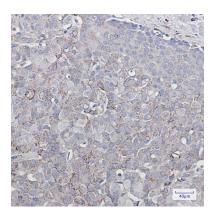
Cellular Location Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane;

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}

Images





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