

GluR4 Polyclonal Antibody

Catalog # AP70107

Product Information

Application WB, IHC-P **Primary Accession** P48058

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW100871

Additional Information

Gene ID 2893

Other Names GRIA4; GLUR4; Glutamate receptor 4; GluR-4; GluR4; AMPA-selective

glutamate receptor 4; GluR-D; Glutamate receptor ionotropic; AMPA 4; GluA4

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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

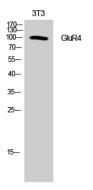
protein {ECO:0000250 | UniProtKB:P19493} Postsynaptic cell membrane

{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

Receptor for glutamate that functions as ligand-gated ion channel in the central nervous system and plays an important role in excitatory synaptic transmission. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. 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. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist. 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 glutamate.

Images



Western Blot analysis of NIH-3T3 cells using GluR4 Polyclonal Antibody

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