

# **GluR4 Polyclonal Antibody**

Catalog # AP70107

### **Product Information**

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

Reactivity Human, Mouse, Rat

Host Rabbit Clonality **Polyclonal Calculated MW** 100871

#### **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

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

azide.

**Storage Conditions** -20°C

#### **Protein Information**

GRIA4 {ECO:0000303 | PubMed:29220673, ECO:0000312 | HGNC:HGNC:4574} Name

**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).

Cell membrane {ECO:0000250 | UniProtKB:P19493}; Multi-pass membrane **Cellular Location** 

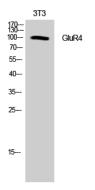
protein {ECO:0000250 | UniProtKB:P19493} Postsynaptic cell membrane

{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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