

## **GRIA2** antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al16208

#### **Specification**

### **GRIA2** antibody - N-terminal region - Product Information

Application WB
Primary Accession P42262

Other Accession NM 000826, NP 000817

Reactivity Human, Mouse, Rat, Rabbit, Horse, Bovine,

**Guinea Pig** 

Predicted Human, Mouse, Rat, Rabbit, Chicken,

Horse, Bovine, Guinea Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 99kDa KDa

# **GRIA2** antibody - N-terminal region - Additional Information

**Gene ID 2891** 

Alias Symbol

GLUR2, GLURB, GluA2, HBGR2, GluR-K2

**Other Names** 

Glutamate receptor 2, GluR-2, AMPA-selective glutamate receptor 2, GluR-B, GluR-K2, Glutamate receptor ionotropic, AMPA 2, GluA2, GRIA2, GLUR2

#### **Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

#### **Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-GRIA2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

GRIA2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

### **GRIA2** antibody - N-terminal region - Protein Information

### Name GRIA2 (HGNC:4572)

## **Function**

lonotropic 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:<a href="http://www.uniprot.org/citations/20614889" target="\_blank">20614889</a>, PubMed:<a href="http://www.uniprot.org/citations/31300657" target="\_blank">31300657</a>, PubMed:<a href="http://www.uniprot.org/citations/8003671" target="\_blank">8003671</a>).



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:<a href="http://www.uniprot.org/citations/14687553" target="\_blank">14687553</a>). 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:<a href="http://www.uniprot.org/citations/20614889" target="\_blank">20614889</a>, PubMed:<a href="http://www.uniprot.org/citations/8003671" target="\_blank">8003671</a>/a>). 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**

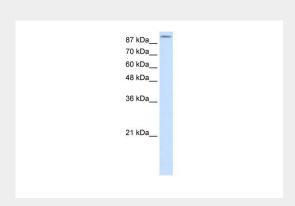
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Postsynaptic density membrane {ECO:0000250|UniProtKB:P23819}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P23819}. Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression (By similarity). Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). {ECO:0000250|UniProtKB:P19491, ECO:0000250|UniProtKB:P23819}

### GRIA2 antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **GRIA2** antibody - N-terminal region - Images



WB Suggested Anti-GRIA2 Antibody Titration: 2.5µg/ml

ELISA Titer: 1:1562500

Positive Control: HepG2 cell lysate



# **GRIA2** antibody - N-terminal region - 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.

## **GRIA2** antibody - N-terminal region - References

Sun W., et al. NeuroReport 5:441-444(1994). Hillier L.W., et al. Nature 434:724-731(2005). Paschen W., et al. J. Neurochem. 63:1596-1602(1994). Kolleker A., et al. Neuron 40:1199-1212(2003). Dev K.K., et al. J. Biol. Chem. 279:41393-41397(2004).