

GRIA4 / GLUR4 Antibody (Internal)

Goat Polyclonal Antibody Catalog # ALS12864

## Specification

# **GRIA4 / GLUR4 Antibody (Internal) - Product Information**

Application Primary Accession Reactivity

Host Clonality Calculated MW WB, IHC <u>P48058</u> Human, Mouse, Rat, Rabbit, Monkey, Chicken, Horse, Bovine, Dog Goat Polyclonal 101kDa KDa

## **GRIA4 / GLUR4 Antibody (Internal) - Additional Information**

Gene ID 2893

**Other Names** Glutamate receptor 4, GluR-4, GluR4, AMPA-selective glutamate receptor 4, GluR-D, Glutamate receptor ionotropic, AMPA 4, GluA4, GRIA4, GLUR4

**Target/Specificity** Human GRIA4 / GLUR4. This antibody is expected to recognize all reported isforms (NP\_000820.3; NP\_001070711.1; NP\_001070712.1). Reported variants NP\_001070712.1 and NP\_001106283.1 represent identical protein.

**Reconstitution & Storage** Store at -20°C. Minimize freezing and thawing.

**Precautions** GRIA4 / GLUR4 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GRIA4 / GLUR4 Antibody (Internal) - Protein Information**

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

Function

Receptor for glutamate that functions as a 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.



#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Cell projection, dendrite. Note=Interaction with CNIH2, CNIH3 and PRKCG promotes cell surface expression.

### GRIA4 / GLUR4 Antibody (Internal) - Protocols

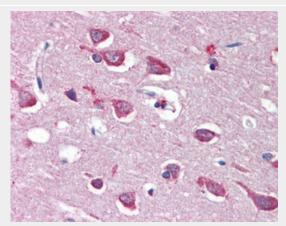
Provided below are standard protocols that you may find useful for product applications.

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

# GRIA4 / GLUR4 Antibody (Internal) - Images



Antibody (0.3 ug/ml) staining of Human Cerebellum lysate (35 ug protein in RIPA buffer).



Anti-GRIA4 / GLUR4 antibody IHC of human brain, cortex.

## GRIA4 / GLUR4 Antibody (Internal) - 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.

### GRIA4 / GLUR4 Antibody (Internal) - References

Fletcher E.J., et al. Recept. Channels 3:21-31(1995). Taylor T.D., et al. Nature 440:497-500(2006). Kato A.S., et al. Neuron 68:1082-1096(2010).