

GRIA4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10724c

Specification

GRIA4 Antibody (Center) - Product Information

Application WB, IHC-P,E Primary Accession P48058

Other Accession <u>P19493</u>, <u>Q9Z2W8</u>, <u>Q38PU5</u>, <u>NP_000820.3</u>

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region
Human, Mouse
Monkey, Rat
Rabbit
Polyclonal
Rabbit IgG
259-287

GRIA4 Antibody (Center) - 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

This GRIA4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 259-287 amino acids from the Central region of human GRIA4.

Dilution

WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GRIA4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GRIA4 Antibody (Center) - Protein Information

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



Tel: 858.875.1900 Fax: 858.875.1999

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

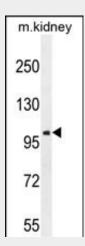
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Cell projection, dendrite. Note=Interaction with CNIH2, CNIH3 and PRKCG promotes cell surface expression.

GRIA4 Antibody (Center) - Protocols

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

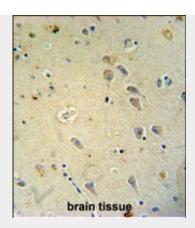
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GRIA4 Antibody (Center) - Images



GRIA4 Antibody (Center) (Cat. #AP10724c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the GRIA4 antibody detected the GRIA4 protein (arrow).





GRIA4 antibody (Center) (Cat. #AP10724c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GRIA4 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

GRIA4 Antibody (Center) - Background

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes composed of multiple subunits, arranged to form ligand-gated ion channels. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. The subunit encoded by this gene belongs to a family of AMPA (alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate)-sensitive glutamate receptors, and is subject to RNA editing (AGA->GGA; R->G). Alternative splicing of this gene results in transcript variants encoding different isoforms, which may vary in their signal transduction properties. Some haplotypes of this gene show a positive association with schizophrenia. [provided by RefSeq].

GRIA4 Antibody (Center) - References

Need, A.C., et al. Eur. J. Hum. Genet. 17(7):946-957(2009) Volpi, S., et al. J Clin Psychiatry 70(6):801-809(2009) Kessels, H.W., et al. Neuron 61(3):340-350(2009) Arai, S., et al. Psychiatr. Genet. 19(1):6-13(2009) Aruscavage, P.J., et al. RNA 6(2):257-269(2000)