

GRIA3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14041a

Specification

GRIA3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P42263

Other Accession P19492, Q9Z2W9, Q38PU6, NP 015564.4,

NP 000819.3, Q71E60

Reactivity Human

Predicted Zebrafish, Monkey, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 101157
Antigen Region 188-217

GRIA3 Antibody (N-term) - Additional Information

Gene ID 2892

Other Names

Glutamate receptor 3, GluR-3, AMPA-selective glutamate receptor 3, GluR-C, GluR-K3, Glutamate receptor ionotropic, AMPA 3, GluA3, GRIA3, GLUR3, GLURC

Target/Specificity

This GRIA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 188-217 amino acids from the N-terminal region of human GRIA3.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

GRIA3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GRIA3 Antibody (N-term) - Protein Information



Name GRIA3 (HGNC:4573)

Synonyms GluA3, GLUR3, GLURC

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 inducing long-term potentiation (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 calcium (PubMed:17989220). The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist (PubMed:17989220). In the presence of CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate (PubMed:21172611).

Cellular Location

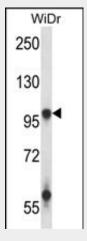
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P19492} Postsynaptic cell membrane {ECO:0000250|UniProtKB:P19492}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P19492}. Postsynaptic density membrane {ECO:0000250|UniProtKB:P19492}

GRIA3 Antibody (N-term) - 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

GRIA3 Antibody (N-term) - Images



GRIA3 Antibody (N-term) (Cat. #AP14041a) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the GRIA3 antibody detected the GRIA3 protein (arrow).



GRIA3 Antibody (N-term) - 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 at this locus results in different isoforms, which may vary in their signal transduction properties.

GRIA3 Antibody (N-term) - References

Ripka, S., et al. Neoplasia 12(8):659-667(2010) Liu, Q., et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 26(4):376-378(2010) Feyissa, A.M., et al. Prog. Neuropsychopharmacol. Biol. Psychiatry 34(2):279-283(2010) Marek, G.J., et al. Mol. Pharmacol. 77(3):317-326(2010) Formicola, D., et al. BMC Med. Genet. 11, 103 (2010):