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GRIA3 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP14041a

Specification

GRIA3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P42263

GRIA3 Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP14041a was selected from the N-term region of GRIA3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GRIA3 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

GRIA3 Antibody (N-term) Blocking peptide - Images

GRIA3 Antibody (N-term) Blocking peptide - Background

Glutamate receptors are the predominant excitatoryneurotransmitter receptors in the mammalian brain and are activatedin a variety of normal neurophysiologic processes. These receptorsare heteromeric protein complexes composed of multiple subunits,arranged to form ligand-gated ion channels. The classification ofglutamate receptors is based on their activation by differentpharmacologic agonists. The subunit encoded by this gene belongs toa family of AMPA (alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate)-sensitive glutamate receptors, and is subject to RNAediting (AGA->GGA; R->G). Alternative splicing at this locusresults in different isoforms, which may vary in their signaltransduction properties.

GRIA3 Antibody (N-term) Blocking peptide - 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) :