

Goat anti-GRIN2A (aa211-224) Antibody

Peptide-affinity purified goat antibody

Catalog # AF4539a

Product Information

| | |
|--------------------------|--|
| Application | IF, Pep-ELISA |
| Primary Accession | Q12879 |
| Other Accession | NP_000824.1 , NP_001127880.1 |
| Reactivity | Human, Mouse, Rat, Dog |
| Host | Goat |
| Clonality | Polyclonal |
| Clone Names | GRIN2A |
| Calculated MW | 165283 |

Additional Information

| | |
|--------------------|---|
| Gene ID | 2903 |
| Other Names | GRIN2A; glutamate receptor, ionotropic, N-methyl D-aspartate 2A; NMDAR2A; NR2A; N-methyl D-aspartate receptor subtype 2A; N-methyl-D-aspartate receptor channel, subunit epsilon-1; N-methyl-D-aspartate receptor subunit 2A; NMDA receptor subtype 2A; OTTHUMP |
| Dilution | IF~~1:50~200 Pep-ELISA~~N/A |
| Format | Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing. |
| Immunogen | This antibody is expected to recognize both reported isoforms (NP_000824.1; NP_001127880.1). The immunizing peptide represents part of an extra-cellular domain. Reported variants represent identical protein: NP_001127879.1, NP_000824.1 |
| Storage | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| Precautions | Goat anti-GRIN2A (aa211-224) Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| | |
|-----------------|--------------------------------------|
| Name | GRIN2A (HGNC:4585) |
| Synonyms | NMDAR2A |

| | |
|--------------------------|--|
| Function | <p>Component of N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with high calcium permeability and voltage-dependent block by Mg(2+) (PubMed:20890276, PubMed:23933818, PubMed:23933819, PubMed:23933820, PubMed:24504326, PubMed:26875626, PubMed:26919761, PubMed:28242877, PubMed:36117210, PubMed:38538865, PubMed:8768735). NMDARs participate in synaptic plasticity for learning and memory formation by contributing to the slow phase of excitatory postsynaptic current, long-term synaptic potentiation, and learning (By similarity). Channel activation requires binding of the neurotransmitter L-glutamate to the GluN2 subunit, glycine or D-serine binding to the GluN1 subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:23933818, PubMed:23933819, PubMed:23933820, PubMed:24504326, PubMed:26875626, PubMed:26919761, PubMed:27288002, PubMed:28095420, PubMed:28105280, PubMed:28126851, PubMed:28182669, PubMed:29644724, PubMed:38307912, PubMed:8768735). NMDARs mediate simultaneously the potassium efflux and the influx of calcium and sodium (By similarity). Each GluN2 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, Ca2(+) permeability, and binding to allosteric modulators (PubMed:26875626, PubMed:26919761). Participates in the synaptic plasticity regulation through activation by the L- glutamate released by BEST1, into the synaptic cleft, upon F2R/PAR-1 activation in astrocyte (By similarity).</p> |
| Cellular Location | <p>Cell projection, dendritic spine {ECO:0000250 UniProtKB:Q00959}. Cell membrane; Multi-pass membrane protein. Synapse {ECO:0000250 UniProtKB:P35436} Postsynaptic cell membrane {ECO:0000250 UniProtKB:Q00959}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250 UniProtKB:P35436}. Note=Expression at the dendrite cell membrane and at synapses is regulated by SORCS2 and the retromer complex. {ECO:0000250 UniProtKB:P35436}</p> |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.