

NMDAR2A Rabbit mAb
Catalog # AP76870**Specification**

NMDAR2A Rabbit mAb - Product Information

Application	WB
Primary Accession	P35436
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	165421

NMDAR2A Rabbit mAb - Additional Information**Gene ID** 14811**Other Names**

Grin2A

Dilution

WB~~1/500-1/1000

Format

Liquid

NMDAR2A Rabbit mAb - Protein Information**Name** Grin2a {ECO:0000312|MGI:MGI:95820}**Function**

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:12008020, PubMed:1374164). 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 (PubMed:7816096, PubMed:8987814). 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:12008020, PubMed:1374164, PubMed:7790891). 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:<a

[10436042](http://www.uniprot.org/citations/10436042), PubMed: [12008020](http://www.uniprot.org/citations/12008020)). 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 (PubMed: [25645137](http://www.uniprot.org/citations/25645137)).

Cellular Location

Cell projection, dendritic spine. Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q12879}. Synapse. Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q00959}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q12879}. Cytoplasmic vesicle membrane. Note=Expression at the dendrite cell membrane and at synapses is regulated by SORCS2 and the retromer complex.

Tissue Location

Detected in striatum (PubMed:28469074). Detected in forbrain (PubMed:7816096). Detected in cerebellum (at protein level) (PubMed:8987814). Detected in brain cortex, piriform cortex, hippocampus, caudate-putamen, dentate gyrus and granule cell layer (PubMed:1374164, PubMed:7816096).

NMDAR2A Rabbit mAb - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NMDAR2A Rabbit mAb - Images

