

Anti-NMDAR2A Picoband Antibody
Catalog # ABO12026**Specification**

Anti-NMDAR2A Picoband Antibody - Product Information

Application	WB
Primary Accession	Q12879
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Glutamate receptor ionotropic, NMDA 2A(GRIN2A) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-NMDAR2A Picoband Antibody - Additional Information

Gene ID 2903

Other Names

Glutamate receptor ionotropic, NMDA 2A, GluN2A, Glutamate [NMDA] receptor subunit epsilon-1, N-methyl D-aspartate receptor subtype 2A, NMDAR2A, NR2A, hNR2A, GRIN2A, NMDAR2A

Calculated MW

165283 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein.

Protein Name

Glutamate receptor ionotropic, NMDA 2A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human NMDAR2A recombinant protein (Position: D958-R1300). Human NMDAR2A shares 89% and 90% amino acid (aa) sequence identity with mouse and rat NMDAR2A, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-NMDAR2A Picoband Antibody - Protein Information

Name GRIN2A

Synonyms NMDAR2A

Function

Component of NMDA receptor complexes that function as heterotetrameric, ligand-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Channel activation requires binding of the neurotransmitter glutamate to the epsilon subunit, glycine binding to the zeta subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:8768735, PubMed:26919761, PubMed:26875626, PubMed:28105280). Sensitivity to glutamate and channel kinetics depend on the subunit composition; channels containing GRIN1 and GRIN2A have lower sensitivity to glutamate and faster deactivation kinetics than channels formed by GRIN1 and GRIN2B (PubMed:26919761, PubMed:26875626). Contributes to the slow phase of excitatory postsynaptic current, long-term synaptic potentiation, and learning (By similarity).

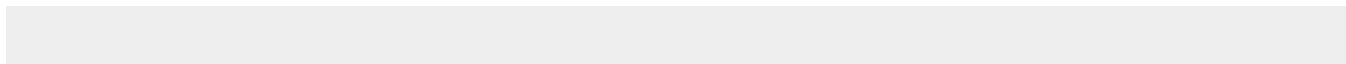
Cellular Location

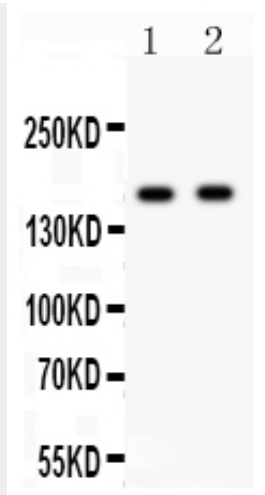
Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q00959}. Cell membrane; Multi-pass membrane protein. Synapse {ECO:0000250|UniProtKB:P35436} Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q00959}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P35436}. Note=Expression at the dendrite cell membrane and at synapses is regulated by SORCS2 and the retromer complex. {ECO:0000250|UniProtKB:P35436}

Anti-NMDAR2A Picoband Antibody - 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](#)

Anti-NMDAR2A Picoband Antibody - Images



Anti- NMDAR2A Picoband antibody, ABO12026, Western blotting All lanes: Anti NMDAR2A (ABO12026) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Predicted bind size: 165KD Observed bind size: 165KD

Anti-NMDAR2A Picoband Antibody - Background

GRIN2A is also known as N-methyl-D-aspartate receptor channel, subunit epsilon-1 (NMDAR2A). This gene encodes a member of the glutamate-gated ion channel protein family. The encoded protein is an N-methyl-D-aspartate (NMDA) receptor subunit. NMDA receptors are both ligand-gated and voltage-dependent, and are involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. These receptors are permeable to calcium ions, and activation results in a calcium influx into post-synaptic cells, which results in the activation of several signaling cascades. Disruption of this gene is associated with focal epilepsy and speech disorder with or without mental retardation. Alternative splicing results in multiple transcript variants.