

Rabbit NMDAR2A Polyclonal Antibody | anti-NMDAR2A antibody

Phospho-NMDAR2A (Tyr943) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328493	Rabbit	Human, Mouse, RatPredicted: Pig, Bovine, Sheep	ELISA, Immunohistochemistry, Western Blot

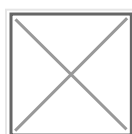
PRODUCT SYNONYMS

NMDAR2A; Polyclonal Antibody; Phospho-NMDAR2A (Tyr943) Antibody; GRIN2B; Glutamate [NMDA] receptor subunit epsilon 1; Glutamate [NMDA] receptor subunit epsilon 2; Glutamate [NMDA] receptor subunit epsilon-1; Glutamate [NMDA] receptor subunit epsilon-2; GRIN2A; hNR2A; hNR3; N methyl D aspartate receptor subtype 2A; N methyl D aspartate receptor subtype 2B; N-methyl D-aspartate receptor subtype 2A; N-methyl D-aspartate receptor subtype 2B; N-methyl-D-aspartate receptor subunit 3; NMDAR2B; NMDE1_HUMAN; NR2A; NR2B; NR3; anti-NMDAR2A antibody

PRODUCT SPECIFICATIONS

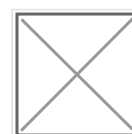
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Bovine, Sheep
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-NMDAR2A (Tyr943) Antibody detects endogenous levels of NMDAR2A only when phosphorylated at Tyr943.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1464
Applicable Applications for anti-NMDAR2A antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NMDAR2A around the phosphorylation site of Tyr943.
Subcellular Location	Plasma Membrane
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts of Mouse brain tissue sample, using Phospho-NMDAR2A (Tyr943) Antibody.



IHC (Immunohistochemistry)

At 1/100 staining rat brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining mouse heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary

ADDITIONAL INFORMATION

Related Product Information for anti-NMDAR2A antibody	Description: 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 Mg2+ (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 higher sensitivity to glutamate and faster 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). Subunit Structure: Heterotetramer. Forms heterotetrameric channels composed of two zeta subunits (GRIN1), and two epsilon subunits (GRIN2A, GRIN2B, GRIN2C or GRIN2D) (in vitro) (PubMed:8768735, PubMed:26919761, PubMed:26875626, PubMed:28105280). Can also form heterotetrameric channels that contain at least one zeta subunit (GRIN1), at least one epsilon subunit, plus GRIN3A or GRIN3B. In vivo, the subunit composition may depend on the expression levels of the different subunits. Found in a complex with GRIN1, GRIN3A and PPP2CB (By similarity). Found in a complex with GRIN1 and GRIN3B (By similarity). Interacts with AIP1 (By similarity). Interacts with HIP1 and NETO1. Interacts with SNX27 (via PDZ domain); the interaction is required for recycling to the plasma membrane when endocytosed and prevent degradation in lysosomes (By similarity). Interacts with PDZ domains of PATJ and DLG4. Interacts with LRFN2 (By similarity). Similarity: Contains an N-terminal domain, a ligand-binding domain and a transmembrane domain. Agonist binding to the extracellular ligand-binding domains triggers channel gating.A hydrophobic region that gives rise to the prediction of a transmembrane span does not cross the membrane, but is part of a discontinuously helical region that dips into the membrane and is probably part of the pore and of the selectivity filter. Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR2A/GRIN2A subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504125
NCBI GeneID	2903
NCBI Accession #	NP_000824.1
NCBI GenBank Nucleotide #	NP_000824.1
UniProt Accession #	Q12879
Molecular Weight	Observed: 165 kDa Predicted: 166 kDa
NCBI Official Full Name	glutamate receptor ionotropic, NMDA 2A isoform 1
NCBI Official Synonym Full Names	glutamate ionotropic receptor NMDA type subunit 2A
NCBI Official Symbol	GRIN2A
NCBI Official Synonym Symbols	LKS; EPND; FESD; NR2A; GluN2A; NMDAR2A
NCBI Protein Information	glutamate receptor ionotropic, NMDA 2A
UniProt Protein Name	Glutamate receptor ionotropic, NMDA 2A
UniProt Gene Name	GRIN2A

UniProt Synonym Gene Names	NMDAR2A; GluN2A; NMDAR2A; NR2A; hNR2A
UniProt Entry Name	NMDE1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nmdar2a-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328493>