ARG52360
anti-NMDAR2A antibody, N-terminal

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR2A
Tested Reactivity	Ms, Rat
Predict Reactivity	Bov, Dog
Tested Application	ICC/IF, IHC-Fr, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR2A
Species	Rat
Immunogen	Synthetic peptide corresponding to amino acid residues from the N-terminal region of the NR2A subunit conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	FESD; NR2A; GluN2A; Glutamate receptor ionotropic, NMDA 2A; N-methyl D-aspartate receptor subtype 2A; EPND; Glutamate [NMDA] receptor subunit epsilon-1; NMDAR2A; LKS; hNR2A

Application Instructions

Application table

Application	Dilution
ICC/IF	1:200 - 1:500
IHC-Fr	1:200 - 1:500
WB	1:1000

Application Note: Specific for the ~180k NR2A subunit of the NMDA receptor.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

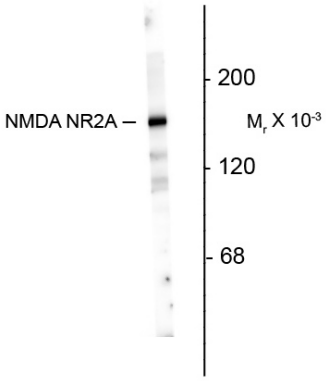
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 14811 Mouse GeneID: 24409 Rat Swiss-port # P35436 Mouse Swiss-port # Q00959 Rat
Gene Symbol	GRIN2A
Gene Full Name	glutamate receptor, ionotropic, N-methyl D-aspartate 2A
Background	The ion channels activated by glutamate are typically divided into two classes. Glutamate receptors that are activated by kainate and α-amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as kainate/AMPA receptors (K/AMPAR). Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR). The NMDAR plays an essential role in memory, neuronal development and it has also been implicated in several disorders of the central nervous system including Alzheimer's, epilepsy and ischemic neuronal cell death (Grosshans et al., 2002; Wenthold et al., 2003; Carroll and Zukin, 2002). The NMDA receptor is also one of the principal molecular targets for alcohol in the CNS (Lovinger et al., 1989; Alvestad et al., 2003; Snell et al., 1996). The NMDAR is also potentiated by protein phosphorylation (Lu et al., 1999). The rat NMDAR1 (NR1) was the first subunit of the NMDAR to be cloned. The NR1 protein can form NMDA activated channels when expressed in Xenopus oocytes but the currents in such channels are much smaller than those seen in situ. Channels with more physiological characteristics are produced when the NR1 subunit is combined with one or more of the NMDAR2 (NR2 A-D) subunits.
Research Area	Neuroscience antibody; Postsynaptic Receptor antibody
Calculated Mw	165 kDa

Images



ARG52360 anti-NMDAR2A antibody, N-terminal WB image

Western Blot: 10 µg of rat hippocampal lysate showing specific immunolabeling of the ~ 180k NR2A subunit stained with NMDAR2A antibody (ARG52360)