

## ARG52355 anti-NMDAR1 C2' antibody

Package: 25 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR1 C2'
Tested Reactivity	Ms, Rat
Predict Reactivity	Hu, Bov
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR1 C2'
Species	Rat
Immunogen	Synthetic peptide corresponding to amino acid residues specific to the NR1 subunit, C2' splice variant insert conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	NMDA1; GluN1; MRD8; NMD-R1; Glutamate receptor ionotropic, NMDA 1; Glutamate [NMDA] receptor subunit zeta-1; N-methyl-D-aspartate receptor subunit NR1; NR1; NMDAR1

### Application Instructions

Application table	Application	Dilution
	IHC-P	frozen sections: 1:1000 to 1:2000
	WB	1:1000
Application Note	Specific for the ~120k NR1 subunit of the NMDA receptor containing the C2' splice variant insert. Does not recognize the NR1 subunits of the NMDA receptor that do not contain the C2' insert. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Powder
Purification	Affinity Purified
Buffer	Lyophilized
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 or below. 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: 14810 Mouse](#)

[GeneID: 24408 Rat](#)

[Swiss-port # P35438 Mouse](#)

[Swiss-port # P35439 Rat](#)

### Gene Symbol

GRIN1

### Gene Full Name

glutamate receptor, ionotropic, N-methyl D-aspartate 1

### Background

The NMDA receptor (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). Increased membrane surface expression of the NMDAR, NR1-Subunit has been associated with synaptic plasticity (Grosshans et al., 2002). There are a number of different splice variants of the NR1-Subunit (Foldes et al., 1994; Zukin and Bennett, 1995). Differential splicing of three exons in the NR1-Subunit generates up to eight NR1-Subunit splice variants and 7 of these have been identified in cDNA libraries. These exons encode a 21 amino acid N-terminal domain (N1) and adjacent sequences in the C-terminus (C1 and C2). Splicing out the C2 cassette eliminates the first stop codon and produces a new reading frame that generates a new sequence of 22 amino acids (C2'). Considerable attention has been focused on the distribution and exp

### Research Area

Neuroscience antibody

### Calculated Mw

105 kDa

### PTM

NMDA is probably regulated by C-terminal phosphorylation of an isoform of NR1 by PKC. Dephosphorylated on Ser-897 probably by protein phosphatase 2A (PPP2CB). Its phosphorylated state is influenced by the formation of the NMDAR-PPP2CB complex and the NMDAR channel activity.

## Images

