

**Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody**  
**Affinity purified rabbit polyclonal antibody**  
**Catalog # AN1205**

**Specification**

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**Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q00961</a>
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	140 KDa

**Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody - Additional Information**

Gene ID	24411
Gene Name	GRIN2C

**Other Names**

Glutamate receptor ionotropic, NMDA 2C, GluN2C, Glutamate [NMDA] receptor subunit epsilon-3, N-methyl D-aspartate receptor subtype 2C, NMDAR2C, NR2C, Grin2c

**Target/Specificity**

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser1244 conjugated to KLH.

**Dilution**

WB~~ 1:1000

**Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

**Antibody Specificity**

Specific for the ~140k NR2C subunit of the NMDA receptor phosphorylated at Ser1244. Immunolabeling is blocked by preadsorption of antibody with the phospho-peptide that was used to generate the antibody but not by the corresponding dephospho-peptide.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

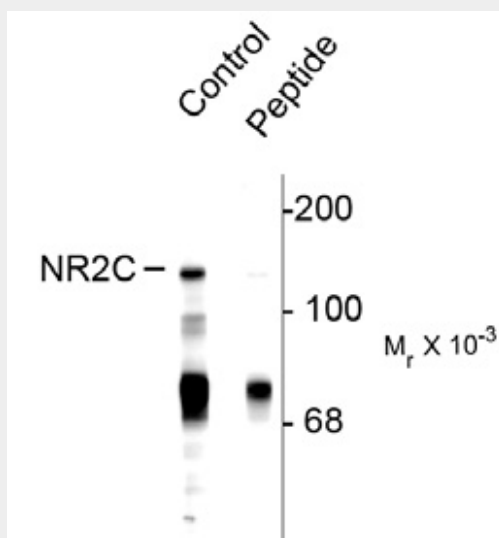
Blue Ice

## Phospho Ser1244 NMDA Receptor, NR2C Subunit 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](#)

## Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody - Images



Western blot of rat cerebellum lysate showing specific immunolabeling of the ~140k NR2C subunit of the NMDA receptor phosphorylated at Ser1244. The phosphospecificity is shown in the second lane where immunoreactivity is blocked by preadsorption with the phospho-peptide (Peptide) used as antigen but not by the dephosphopeptide (not shown).

## Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody - Background

The ion channels activated by glutamate 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 NR2C subunit of the receptor is thought to influence the NMDAR conductance level (Ebrailidze et al., 1996). Phosphorylation of Ser1244 has been shown to regulate NMDA receptor channel function (Chen et al., 2006).

## Phospho Ser1244 NMDA Receptor, NR2C Subunit Antibody - References

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Carroll RC, Zukin RS (2002) NMDA-receptor trafficking and targeting: implications for synaptic transmission and plasticity. *Trends Neurosci* 25:571-577.

Ebrailidze AK, Rossi DJ, Tonegawa S, Slater NT (1996) Modification of NMDA receptor channels and synaptic transmission by targeted disruption of the NR2C gene. *J Neurosci* 16:5014-5025.

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