10320 Camino Santa Fe, Suite G
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Phospho Ser1096 NMDA Receptor, NR2C Subunit Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1204

Specification

Phospho Ser1096 NMDA Receptor, NR2C Subunit Antibody - Product Information

Application	**WB**
Primary Accession	Q00961
Reactivity	**Mouse, Rat**
Predicted	**Bovine, Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**140 KDa**

Phospho Ser1096 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 Ser1096 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 Ser1096. 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 Ser1096 NMDA Receptor, NR2C Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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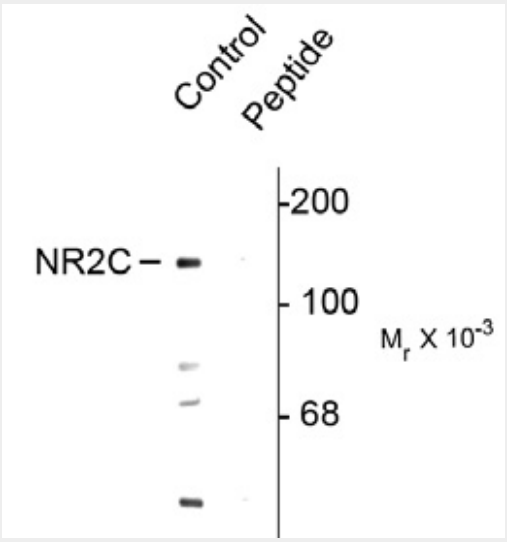
Phospho Ser1096 NMDA Receptor, NR2C Subunit Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho Ser1096 NMDA Receptor, NR2C Subunit Antibody - Images



Western blot of mouse brain lysate showing specific immunolabeling of the ~140k NR2C subunit of the NMDA receptor phosphorylated at Ser1096. 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 Ser1096 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 (Ebralidze et al., 1996). Phosphorylation of Ser1096 by PKB on NR2C has been recently demonstrated to regulate NMDA receptor binding to
14-3-3 (Chen & Roche 2009).

Phospho Ser1096 NMDA Receptor, NR2C Subunit Antibody - References

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