

Product datasheet for **AP08700PU-N**

Grin1 (C2' Splice Variant) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/1000. Immunohistochemistry on Frozen Sections: 1/1000-1/2000 (unpublished observations).
Reactivity:	Bovine, Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide from the NR1 subunit, C2' splice variant insert of rat NMDA Receptor.
Specificity:	This antibody recognizes 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.
Formulation:	5 mM Ammonium Bicarbonate. State: Aff - Purified State: Lyophilized purified Ig fraction.
Reconstitution Method:	Restore in 50 µl PBS (137 mM NaCl, 7.5 mM Na ₂ HPO ₄ , 2.7 mM KCl, 1.5 mM KH ₂ PO ₄ , pH 7.4) before use.
Purification:	Affinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	glutamate ionotropic receptor NMDA type subunit 1
Database Link:	Entrez Gene 24408 Rat P35439



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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 expression of these splice variants that may affect the functional properties and regulation of the NMDAR.

Synonyms:

NMDAR1,GRIN1

Note:

Purification Method: Prepared from Rabbit serum by affinity purification using a column to which the peptide immunogen was coupled.

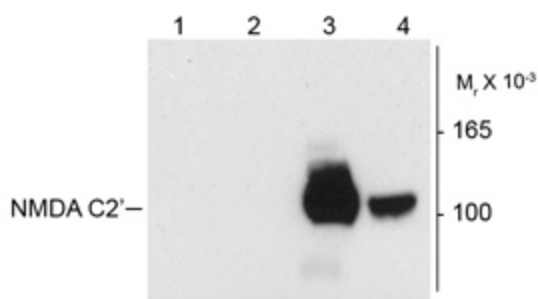
Product images:

Figure 1. Western blot of 10 ug of HEK 293 cells expressing: Lane 1: HEK cells without NR1 expression (Mock). Lane 2: NR1 subunit containing only the C2 Insert. Lane 3: NR1 subunit containing the C1 and C2' Insert. Lane 4: NR1 subunit containing the N1 and C2' Insert showing specific immunolabeling of the ~120k NR1 subunit of the NMDA receptor containing the C2' splice variant insert.