

Datasheet for ABIN361404

**anti-GRIN1/NMDAR1 antibody (Splice Variant C2')**[Go to Product page](#)**2** Images

## Overview

Quantity:	25 µg
Target:	GRIN1/NMDAR1 (GRIN1)
Binding Specificity:	Splice Variant C2'
Reactivity:	Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GRIN1/NMDAR1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Specificity:	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.
Purification:	The antibody is affinity-purified from rabbit antiserum by affinity chromatography using epitope-specific immunogen.

## Target Details

Target:	GRIN1/NMDAR1 (GRIN1)
Alternative Name:	NMDA Receptor, NR1 Subunit ( <a href="#">GRIN1 Products</a> )
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

Target Details

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. Anti-NMDAR, NR1 Subunit, C2' Splice Variant Insert 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.

Pathways: [Synaptic Membrane](#), [Feeding Behaviour](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

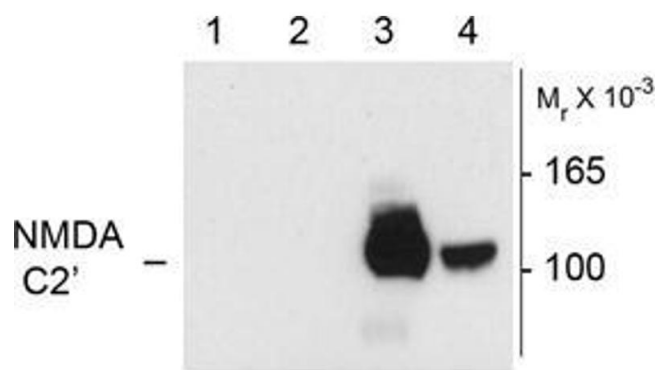
Application Details

Application Notes: Recommended Dilution: WB: 1:1000 IHC (frozen sections, unpublished observations): 1:1000 to 1:2000 Quality Control: Western blots performed on each lot.

Restrictions: For Research Use only

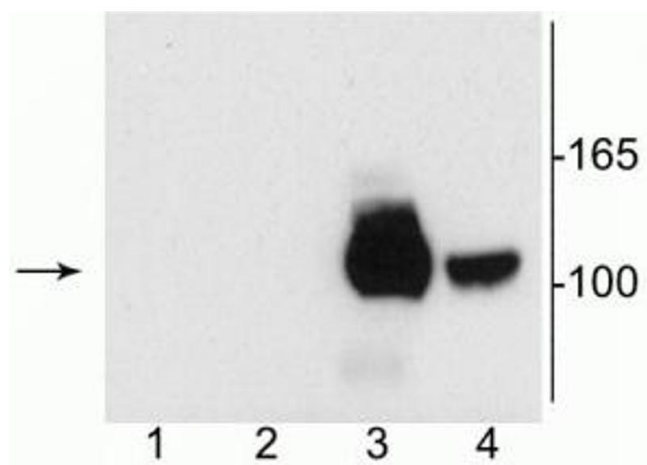
Handling

Storage: -20 °C



Western Blotting

**Image 1.** Western blots 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.



Western Blotting

**Image 2.** Western blot of 10 µg of HEK 293 cells specific immunolabeling of the ~120 kDa NR1 subunit of the NMDA receptor containing the C2' splice variant insert (lanes 3 and 4). 1) No NR1 expression; 2) NR1 subunit containing only the C2 Insert; 3) NR1 subunit containing the C1 and C2' Insert; 4) NR1 subunit containing the N1 and C2' Insert.