


Product datasheet

Anti-NMDAR1 antibody ab52177

★★★★☆ [2 Abreviews](#) [18 References](#) [2 Images](#)

Overview

Product name	Anti-NMDAR1 antibody
Description	Rabbit polyclonal to NMDAR1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide within Human NMDAR1 aa 849-913. The exact sequence is proprietary. From around the phosphorylation site of serine 897 (R-S-S-K-D).
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 0.87% Sodium chloride, 50% Glycerol (glycerin, glycerine)</p> <p>Without Mg+2 and Ca+2</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52177 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆ (1)	1/500 - 1/1000. Predicted molecular weight: 105 kDa.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.

Target

Function

NMDA receptor subtype of glutamate-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. This protein plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. It mediates neuronal functions in glutamate neurotransmission. Is involved in the cell surface targeting of NMDA receptors.

Sequence similarities

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR1/GRIN1 subfamily.

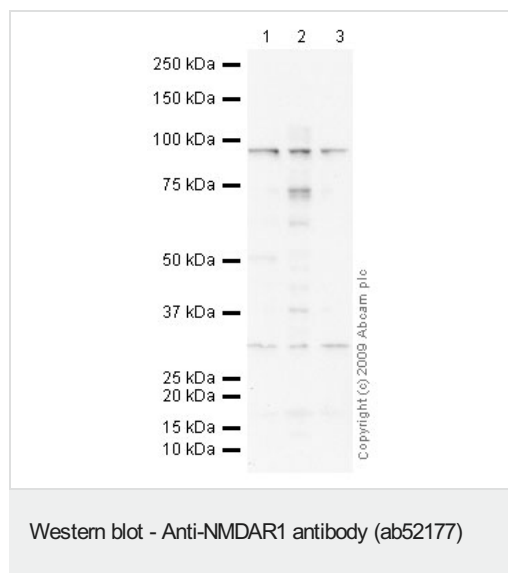
Post-translational modifications

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.

Cellular localization

Cell membrane. Cell junction > synapse > postsynaptic cell membrane. Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Enriched in post-synaptic plasma membrane and post-synaptic densities.

Images



All lanes : Anti-NMDAR1 antibody (ab52177) at 1/500 dilution

Lane 1 : A549 (Human lung adenocarcinoma epithelial cell line) whole cell lysate

Lane 2 : Y79 (Human retinoblastoma cell line) whole cell lysate

Lane 3 : Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

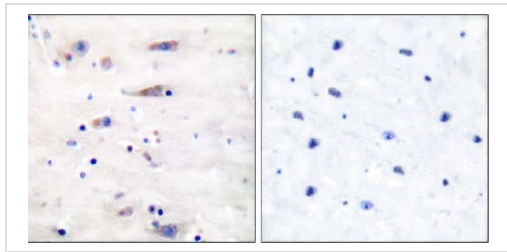
Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 105 kDa

Observed band size: 95 kDa

Additional bands at: 30 kDa, 75 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NMDAR1 antibody (ab52177)

ab52177 at 1/50 dilution staining NMDAR1 in human brain tissue by immunohistochemistry (paraffin embedded tissue) in the presence (right image) or absence (left image) of the immunizing peptide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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