abcam

Product datasheet

Anti-NMDAR1 antibody [N308/48] - Neuronal Marker ab134308

12 References   4 图像

概述

产品名称	Anti-NMDAR1抗体[N308/48] - Neuronal Marker
描述	小鼠单克隆抗体[N308/48] to NMDAR1 - Neuronal Marker
宿主	Mouse
经测试应用	**适用于:** Flow Cyt, WB, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Fusion protein corresponding to Rat NMDAR1 aa 1-400 (Hinge). Database link: **P35439**
阳性对照	WB: Human, Mouse and Rat brain membrane tissue lysate, Neuro-2a cell lysate. ICC/IF: SK-N-BE cells. Flow Cyt: SH-SY5Y cells.
常规说明	The clone number has been updated from S308-48 to N308/48, both clone numbers name the same antibody clone.

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.

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

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20ºC.
存储溶液	Preservative: 0.09% Sodium azide Constituents: 49% PBS, 50% Glycerol
纯度	Protein G purified
克隆	单克隆
克隆编号	N308/48
同种型	IgG1

应用

The Abpromise guarantee　　　　**Abpromise™承诺保证使用ab134308于以下的经测试应用**

"应用说明"部分 下显示的仅为**推荐的起始稀释度**；实际**最佳**的稀释度/浓度应由**使用者**检定。

应用	Ab评论	说明
Flow Cyt		Use at an assay dependent concentration.
WB		1/1000. Predicted molecular weight: 105 kDa.
ICC/IF		1/100.

靶标

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功能	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.
序列相似性	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR1/GRIN1 subfamily.
翻译后修饰	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.
细胞定位	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.

图片

Western blot - Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308)
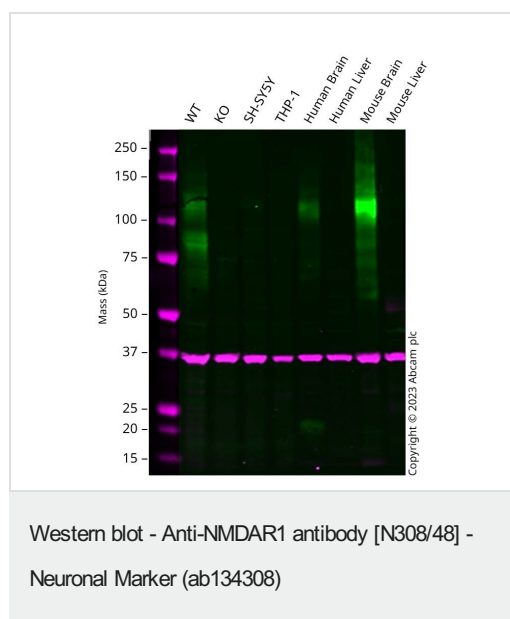
All lanes : Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308) at 1/1000 dilution

Lane 1 : Wild-type Neuro-2a cell lysate

Lane 2 : GRIN1 knockout Neuro-2a cell lysate

Lane 3 : SH-SY5Y UNBOILED cell lysate

Lane 4 : THP-1 UNBOILED cell lysate

Lane 5 : Human Brain UNBOILED cell lysate

Lane 6 : Human Liver UNBOILED cell lysate

Lane 7 : Mouse Brain UNBOILED cell lysate

Lane 8 : Mouse Liver UNBOILED cell lysate

Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 105 kDa
Observed band size: 120 kDa

Western blot: Anti-GRIN1 antibody [N308/48] (ab134308) staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab134308 was shown to bind specifically to GRIN1. A band was observed at 120 kDa in wild-type Neuro-2a cell lysates with no signal observed at this size in GRIN1 knockout cell line **ab281960** (knockout cell lysate **ab282987**). To generate this image, unboiled wild-type and GRIN1 knockout Neuro-2a cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L 800CW and Goat anti-Rabbit IgG H&L 680RD at 1/20000 dilution.
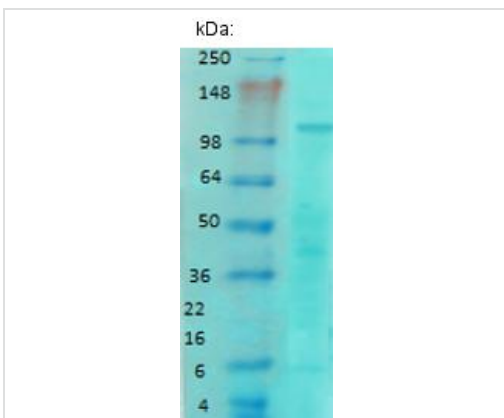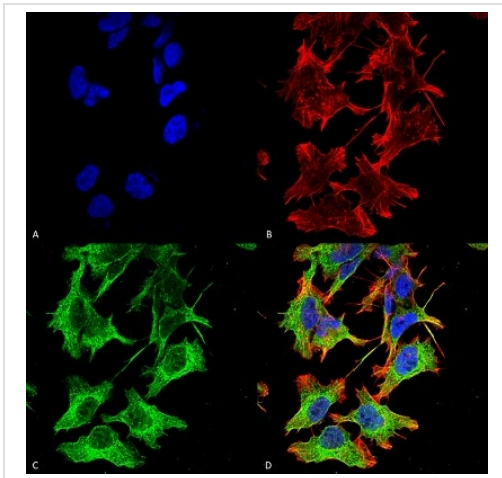

Western blot - Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308)

Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308) at 1/1000 dilution + Rat brain membrane tissue lysate

Secondary
Goat anti-mouse IgG HRP

Predicted band size: 105 kDa

Immunocytochemistry/ Immunofluorescence - Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308)

SK-N-BE cells labeling NMDAR1 using ab134308 at 1/100 dilution in ICC/IF. Cells were fixed using 4% formaldehyde for 15 minutes at room temperature. Incubated with primary antibody for 1 hour at room temperature. Secondary antibody was a goat anti-mouse ATTO 488 (green) at 1/100 dilution for 1 hour at room temperature. Counterstained with Phalloidin Texas Red F-actin stain. Nuclei were stained with DAPI (blue).
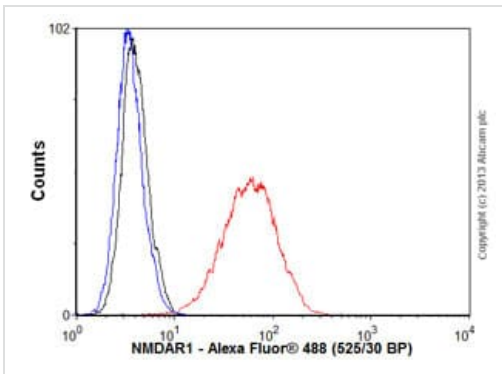
Flow Cytometry - Anti-NMDAR1 antibody [N308/48] - Neuronal Marker (ab134308)

Overlay histogram showing SH-SY5Y cells stained with ab134308 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab134308, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (**ab150113**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive result in 80% methanol (5 min) fixed SH-SY5Y cells used under the same conditions. Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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