

Product datasheet

Anti-NMDAR2B antibody [NR2B] ab28373

★★★★☆ 3 Abreviews 9 References 5 Images

Overview

Product name	Anti-NMDAR2B antibody [NR2B]
Description	Mouse monoclonal [NR2B] to NMDAR2B
Host species	Mouse
Specificity	Detects the N-methyl-D-aspartate (NMDA) receptor type 2B. This antibody has been tested in mouse and rat brain in western blotting. It has not been tested in human for Western blotting - only for ICC on transfected HEK cells.
Tested applications	Suitable for: ICC, WB, IHC-P, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Rat NMDAR2B aa 934-1457.
Positive control	WB: Mouse brain tissue ICC: transfected HEK cells

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
Purity	Protein A purified
Purification notes	Protein A Chromatography
Clonality	Monoclonal
Clone number	NR2B
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab28373** 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
ICC	★★★★☆	Use a concentration of 1 µg/ml.
WB	★★★★☆	Use a concentration of 2 µg/ml. Predicted molecular weight: 166 kDa.
IHC-P		1/10 - 1/100.
Flow Cyt		Use 1-2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

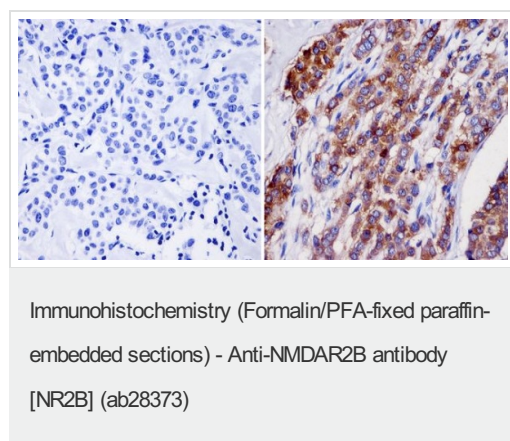
Function	NMDA receptor subtype of glutamate-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine.
Tissue specificity	Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal cells, lower expression in the basal ganglia.
Sequence similarities	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR2B/GRIN2B subfamily.
Cellular localization	Cell membrane. Cell junction > synapse > postsynaptic cell membrane.

Images

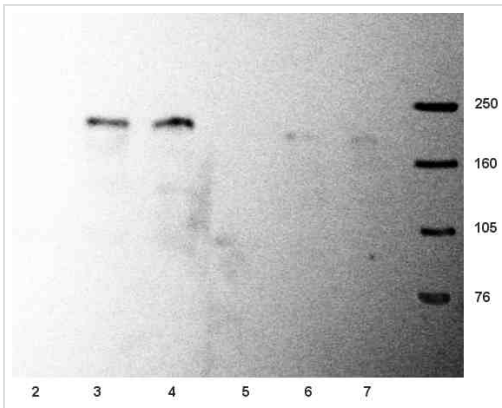


Anti-NMDAR2B antibody [NR2B] (ab28373) at 2 µg/ml + mouse brain tissue

Predicted band size: 166 kDa



ab28373 staining NMDAR2B in Human breast tissue sections (right) compared with negative control (left) by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 3% H₂O₂-methanol for 15 minutes at room temperature; antigen retrieval was by heat mediation in a sodium citrate buffer. Samples were incubated with primary antibody (1/20) overnight at 4°C. A HRP-conjugated secondary antibody was used for detection.



Western blot - Anti-NMDAR2B antibody [NR2B] (ab28373)

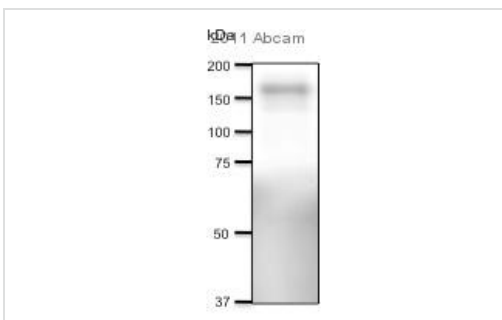
Lanes 2-4 : Anti-NMDAR2B antibody [NR2B] (ab28373) at 1/500 dilution

Lanes 5-7 : Anti-NMDAR2B antibody [NR2B] (ab28373) at 1/1000 dilution

Lanes 3 & 6 : Mouse brain (50ug)

Lanes 4 & 7 : Rat brain (50ug)

Predicted band size: 166 kDa



Western blot - Anti-NMDAR2B antibody [NR2B] (ab28373)

This image is courtesy of an anonymous Abreview

Anti-NMDAR2B antibody [NR2B] (ab28373) at 1/500 dilution + Rat P14 Cortex Lysate, vesicular fraction at 5 µg

Secondary

HRP conjugated Donkey anti-mouse IgG at 1/15000 dilution

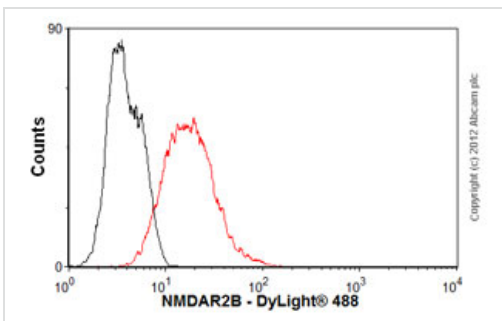
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 166 kDa

Samples were incubated with primary antibody for 12 hours at 4°C.

Blocked with 5% milk for 1 hour at 22°C.



Flow Cytometry - Anti-NMDAR2B antibody [NR2B] (ab28373)

Overlay histogram showing SH-SY5Y cells stained with ab28373 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab28373, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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