




## Product datasheet

### Anti-NMDAR2B antibody [S59] ab93610

Recombinant

★★★★★ [2 Abreviews](#) [22 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-NMDAR2B antibody [S59]
<b>Description</b>	Mouse monoclonal [S59] to NMDAR2B
<b>Host species</b>	Mouse
<b>Specificity</b>	No cross-reactivity with NMDAR2A.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, ICC/IF, IHC-P, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Dog 
<b>Immunogen</b>	Recombinant fragment within Rat NMDAR2B aa 1-300 (N terminal). The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b><u>contact</u></b> our Scientific Support team to discuss your requirements. Database link: <a href="#">Q00960</a> <div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	Flow Cyt: SH-SY5Y cells. WB: Rat brain lysate. IHC-P : mouse backskin. ICC/IF: SH-SY5Y cells.
<b>General notes</b>	<p>The clone number has been updated from S59-36 to N59/36, both clone numbers name the same antibody clone.</p> <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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituents: 50% Glycerol, PBS

<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	S59
<b>Isotype</b>	IgG2b

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab93610 in the following tested applications.

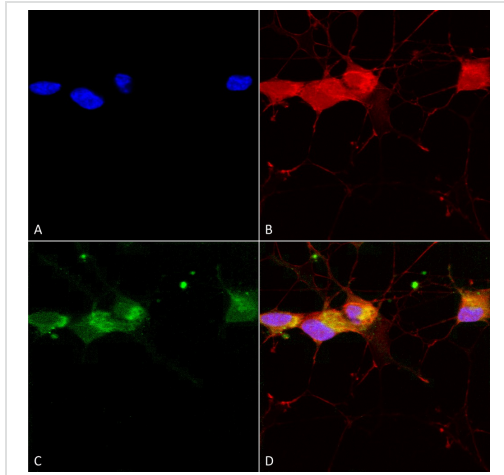
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>Flow Cyt</b>		Use 1µg for 10 <sup>6</sup> cells. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
<b>ICC/IF</b>	★★★★★ (1)	Use at an assay dependent concentration.
<b>IHC-P</b>		Use at an assay dependent concentration.
<b>IP</b>		Use at an assay dependent concentration.
<b>WB</b>		Use a concentration of 1 - 10 µg/ml. Detects a band of approximately 166 kDa (predicted molecular weight: 166 kDa).

## Target

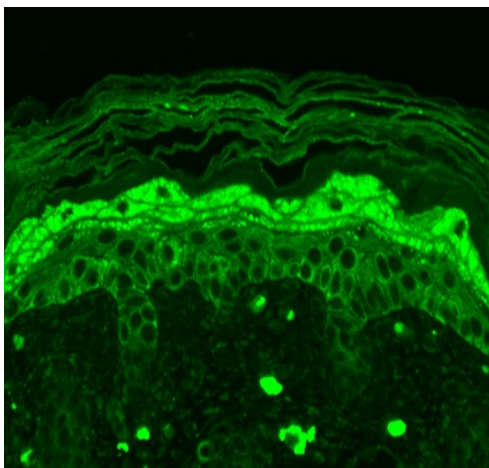
<b>Function</b>	NMDA receptor subtype of glutamate-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine.
<b>Tissue specificity</b>	Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal cells, lower expression in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

## Images



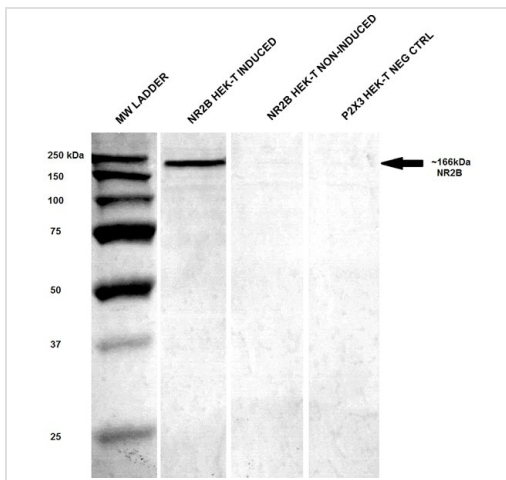
Immunocytochemistry/ Immunofluorescence - Anti-NMDAR2B antibody [S59] (ab93610)

Immunocytochemistry/Immunofluorescence analysis of 4% PFA fixed Human Neuroblastoma cells (SH-SY5Y) using ab93610 at 1/50 dilution. The section was incubated with ab93610 overnight at 4°C with slow rocking followed by AlexaFluor 488 secondary antibody at 1/100 dilution for 1 hour at RT (Green). Hoechst was used as nuclear stain (A) and Phalloidin-iFluor 647 (red) was used as actin counterstaining (B).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NMDAR2B antibody [S59] (ab93610)

Immunohistochemistry analysis of Bouin's Fixed and paraffin-embedded Mouse backskin tissue using ab93610 at 1/100 dilution. The section was incubated with ab93610 for 1 hour at RT followed by FITC Goat Anti-Mouse secondary antibody at 1/50 dilution for 1 hour at RT (green). Positive Filaggrin-like staining and dermal staining observed with mouse backskin tissue.



Western blot - Anti-NMDAR2B antibody [S59]  
(ab93610)

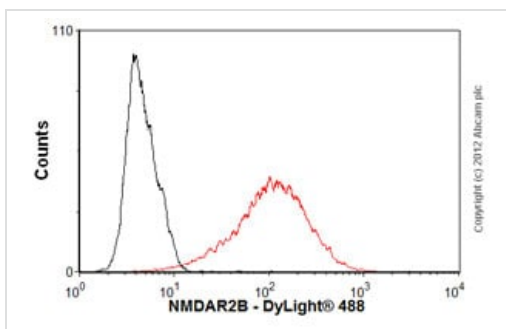
**All lanes :** Anti-NMDAR2B antibody [S59] (ab93610) at 1/250 dilution

**Lane 1 :** Induced HEK-T lysates

**Lane 2 :** Non-Induced HEK-T lysates

**Lane 3 :** P23X HEK-T negative control lysates

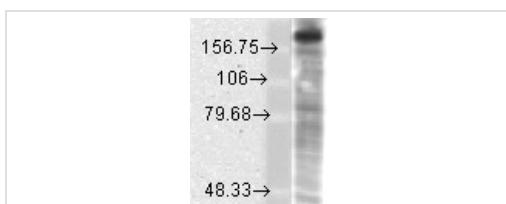
**Predicted band size:** 166 kDa



Flow Cytometry - Anti-NMDAR2B antibody [S59]  
(ab93610)

Overlay histogram showing SH-SY5Y cells stained with ab93610 (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 (ab93610, 2µg/1x10<sup>6</sup> 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 IgG2b [PLPV219] ([ab91366](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. 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



Western blot - Anti-NMDAR2B antibody [S59]  
(ab93610)

Anti-NMDAR2B antibody [S59] (ab93610) at 1/1000 dilution + Rat brain membrane lysate at 15 µg

### Secondary

Sheep Anti-Mouse IgG: HRP for 1 hour at RT

**Predicted band size:** 166 kDa

Blocking buffer: 1.5% BSA for 30 minutes at RT.

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

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