

Datasheet for ABIN2483901  
**anti-NMDAR2A antibody (AA 75-325) (PE)**[Go to Product page](#)

## 3 Images

## Overview

|                      |   |
|----------------------|---|
| Quantity:            | 100 µg  |
| Target:              | NMDAR2A (GRIN2A)  |
| Binding Specificity: | AA 75-325   |
| Reactivity:          | Rat   |
| Host:                | Mouse   |
| Clonality:           | Monoclonal  |
| Conjugate:           | This NMDAR2A antibody is conjugated to PE   |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC) |

## Product Details

|                   |   |
|-------------------|---|
| Immunogen:        | Fusion protein amino acids 75-325 (extracellular N-terminus) of rat GluN2A/NR2A |
| Clone:            | S327A-38  |
| Isotype:          | IgG2b   |
| Specificity:      | Detects ~170 kDa. Does not react with NR2B.                                     |
| Cross-Reactivity: | Human, Mouse, Rat   |
| Purification:     | Protein G Purified  |

## Target Details

|         |                  |
|---------|------------------|
| Target: | NMDAR2A (GRIN2A) |
|---------|------------------|

## Target Details

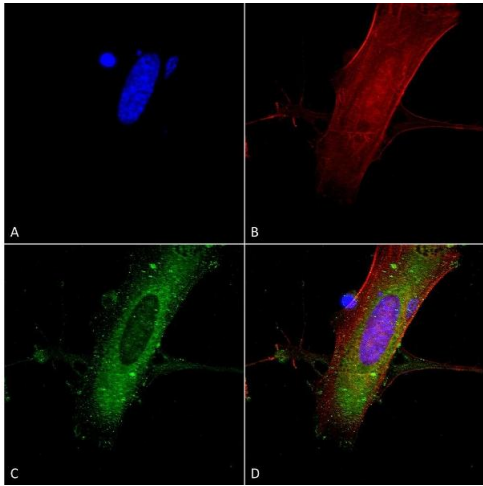
|                   |  |
|-------------------|--|
| Alternative Name: | NR2A ( <a href="#">GRIN2A Products</a> )   |
| Background:       | N-methyl-D-aspartate (NMDA) receptors are a class of ionotropic glutamate-gated ion channels. These receptors have been shown to be involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. NMDA receptor channels are heteromers composed of the key receptor subunit NMDAR1 (GRIN1) and 1 or more of the 4 NMDAR2 subunits: NMDAR2A (GRIN2A), NMDAR2B (GRIN2B), NMDAR2C (GRIN2C) and NMDAR2D (GRIN2D). |
| Gene ID:          | 24409  |
| NCBI Accession:   | <a href="#">NP_036705</a>  |
| UniProt:          | <a href="#">Q00959</a>   |
| Pathways:         | <a href="#">Synaptic Membrane</a> , <a href="#">Regulation of long-term Neuronal Synaptic Plasticity</a>   |

## Application Details

|                    |   |
|--------------------|---|
| Application Notes: | <ul style="list-style-type: none"><li>• WB (1:1000)</li><li>• ICC/IF (1:100)</li><li>• optimal dilutions for assays should be determined by the user.</li></ul>   |
| Comment:           | 1 µg/ml of ABIN2483901 was sufficient for detection of GluN2A/NR2A in 20 µg of COS cells transiently transfected with GFP-tagged NR2A lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody. |
| Restrictions:      | For Research Use only   |

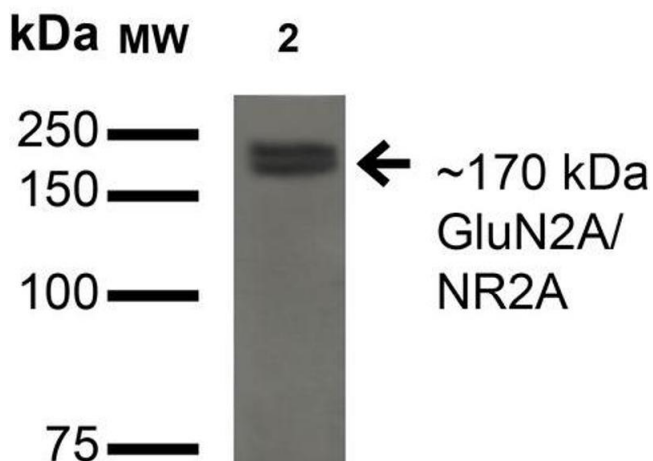
## Handling

|                    |  |
|--------------------|--|
| Format:            | Liquid   |
| Concentration:     | 1 mg/mL  |
| Buffer:            | PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated                              |
| Preservative:      | Sodium azide   |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage:           | 4 °C   |
| Storage Comment:   | Conjugated antibodies should be stored at 4°C  |



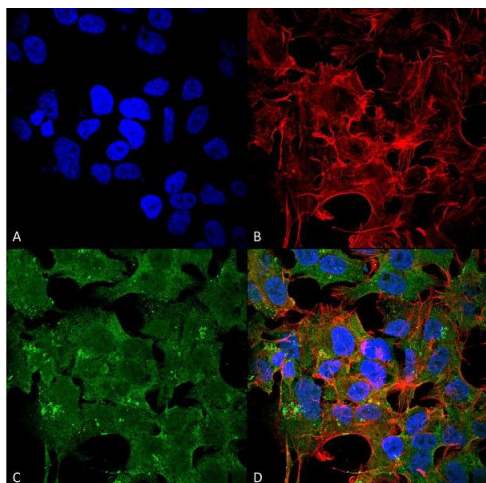
### Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2A/NR2A Monoclonal Antibody, Clone S327A-38 (ABIN2483901). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-GluN2A/NR2A Monoclonal Antibody (ABIN2483901) at 1:100 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GluN2A/NR2A Antibody (D) Composite.



### Western Blotting

**Image 2.** Western Blot analysis of Monkey COS cells transfected with GFP-tagged NR2A showing detection of ~170 kDa GluN2A/NR2A protein using Mouse Anti-GluN2A/NR2A Monoclonal Antibody, Clone S327A-38 . Lane 1: Molecular Weight Ladder. Lane 2: Monkey COS cells transfected with GFP-tagged NR2A. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-GluN2A/NR2A Monoclonal Antibody at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~170 kDa.



### Immunofluorescence (fixed cells)

**Image 3.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2A/NR2A Monoclonal Antibody, Clone S327A-38. Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GluN2A/NR2A Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cell Membrane, Cytoplasm. Magnification: 60X. (A) Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain. (B) Anti-GluN2A/NR2A Antibody. (C) Composite.