

Datasheet for ABIN1686643
anti-NMDAR2A antibody (AA 75-325)[Go to Product page](#)

3 Images

Overview

Quantity:	100 µg
Target:	NMDAR2A (GRIN2A)
Binding Specificity:	AA 75-325
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
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)
Alternative Name:	NR2A (GRIN2A Products)

Target Details

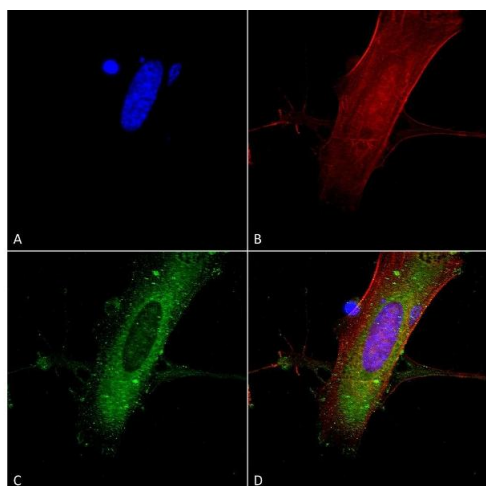
Background:	N-methyl-D-aspartate (NMDA) receptors are a class of ionotropic glutamate-gated ion channels. These receptors have been shown to be involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and 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:	NP_036705
UniProt:	Q00959
Pathways:	Synaptic Membrane , Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Application Notes:	<ul style="list-style-type: none">• WB (1:1000)• ICC/IF (1:100)• optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN1686643 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

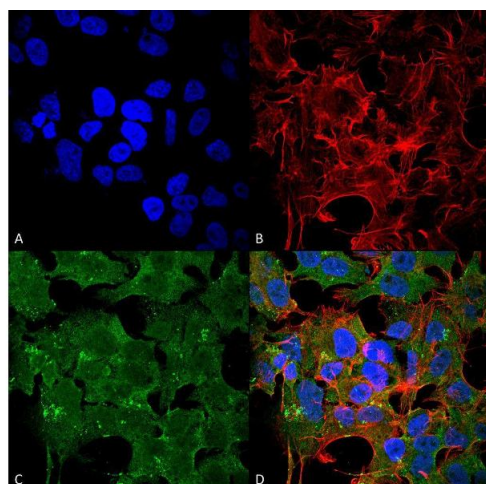
Handling

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:	-20 °C
Storage Comment:	-20°C



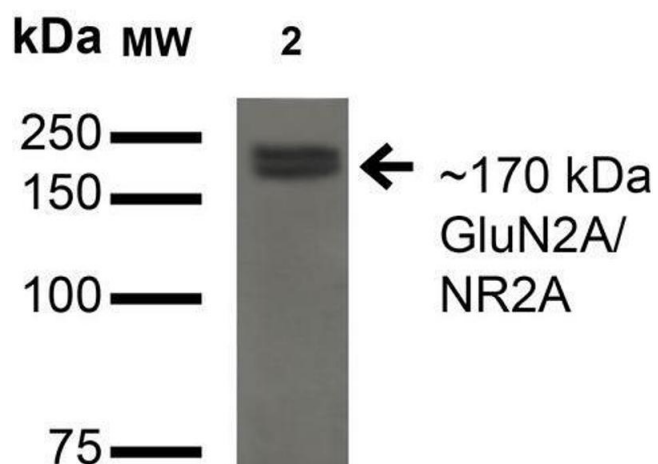
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2A/NR2A Monoclonal Antibody, Clone S327A-38 (ABIN1686643). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-GluN2A/NR2A Monoclonal Antibody (ABIN1686643) 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.



Immunofluorescence (fixed cells)

Image 2. 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.



Western Blotting

Image 3. 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.