

Datasheet for ABIN2483581

**anti-GRIN1/NMDAR1 antibody (AA 42-361) (Atto 488)**[Go to Product page](#)**3** Images

## Overview

Quantity:	100 µg
Target:	GRIN1/NMDAR1 (GRIN1)
Binding Specificity:	AA 42-361
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GRIN1/NMDAR1 antibody is conjugated to Atto 488
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

## Product Details

Immunogen:	Fusion protein amino acids 42-361 (extracellular N-terminus) of rat NR1
Clone:	S308-48
Isotype:	IgG1
Specificity:	Detects ~105 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

## Target Details

Target:	GRIN1/NMDAR1 (GRIN1)
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## Target Details

Alternative Name:	GluN1 ( <a href="#">GRIN1 Products</a> )
Background:	The NMDA receptor (NMDAR), a glutamate receptor, is the predominant molecular device for controlling synaptic plasticity and memory function (1). The NMDA receptor forms a heterotetramer between two NR1 and two NR2 subunits (the subunits are also called glutamate-binding NMDA receptor subunits or GluN for short), two obligatory NR1 subunits and two regionally localized NR2 subunits. A related gene family of NR3 A and B subunits have an inhibitory effect on receptor activity. Multiple receptor isoforms with distinct brain distributions and functional properties arise by selective splicing of the NR1 transcripts and differential expression of the NR2 subunits.
Gene ID:	24408
NCBI Accession:	<a href="#">NP_058706</a>
UniProt:	<a href="#">P35439</a>
Pathways:	<a href="#">Synaptic Membrane</a> , <a href="#">Feeding Behaviour</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>• IHC (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 ABIN2483581 was sufficient for detection of NR1 glutamate receptor in 20 µg of rat brain membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

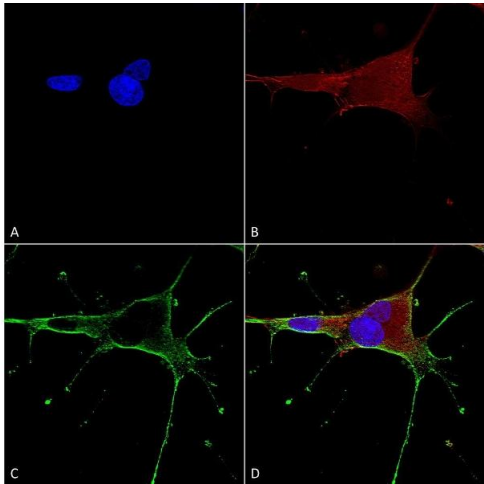
## Handling

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.

Handling

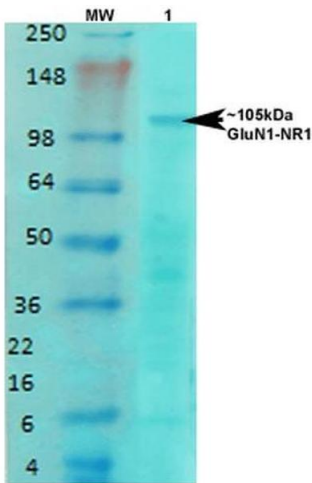
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



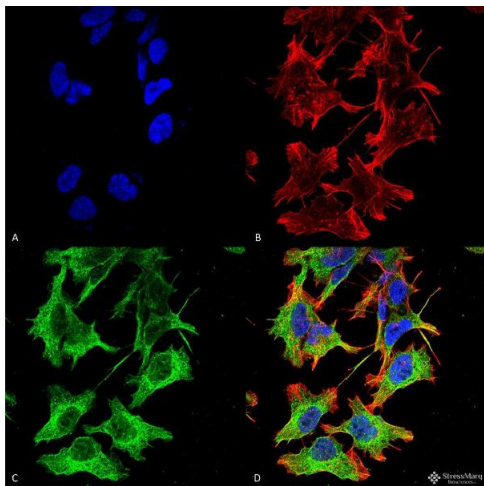
Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN1/NR1 Monoclonal Antibody, Clone S308-48 (ABIN2483581). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-GluN1/NR1 Monoclonal Antibody (ABIN2483581) at 1:50 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) GluN1/NR1 Antibody (D) Composite.



Western Blotting

**Image 2.** Western Blot analysis of Rat brain membrane lysate showing detection of NMDAR1 NMDA receptor protein using Mouse Anti-NMDAR1 NMDA receptor Monoclonal Antibody, Clone S308-48 . Primary Antibody: Mouse Anti-NMDAR1 NMDA receptor Monoclonal Antibody at 1:1000.



### Immunofluorescence (fixed cells)

**Image 3.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN1/NR1 Monoclonal Antibody, Clone S308-48 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GluN1/NR1 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GluN1/NR1 Antibody (D) Composite.