

## Mouse NR2B Monoclonal Antibody | anti-Grin2b antibody

NR2B Antibody: ATTO 594

| CATALOG # | HOST  | REACTIVITY        | APPLICATIONS                                            |
|-----------|-------|-------------------|---------------------------------------------------------|
| AAA103120 | Mouse | Human, Rat, Mouse | Immunoprecipitation, Immunohistochemistry, Western Blot |

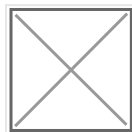
### PRODUCT SYNONYMS

NR2B; Monoclonal Antibody; NR2B Antibody: ATTO 594; NMDAR2B; hNR3; MGC142180; glutamate receptor subunit epsilon-2; NR3; anti-Grin2b antibody

### PRODUCT SPECIFICATIONS

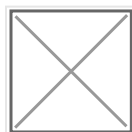
|                                                  |                                                                         |
|--------------------------------------------------|-------------------------------------------------------------------------|
| Host                                             | Mouse                                                                   |
| Reactivity                                       | Human, Rat, Mouse                                                       |
| Clonality                                        | Monoclonal                                                              |
| Isotype                                          | IgG2b                                                                   |
| Clone Number                                     | S59-36                                                                  |
| Form/Format                                      | Protein G Purified                                                      |
| Concentration                                    | 1mg/mL (varies by lot)                                                  |
| Sequence Length                                  | 1482                                                                    |
| Applicable Applications for anti-Grin2b antibody | IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot) |
| Conjugate                                        | ATTO 594                                                                |
| Storage Buffer                                   | PBS pH7.4, 50% glycerol, 0.09% sodium azide                             |
| Preparation and Storage                          | -20 degree C                                                            |

### IMAGES



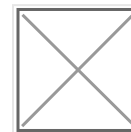
#### WB (Western Blot)

Western Blot analysis of Rat brain membrane lysate showing detection of GluN2B/NR2B protein using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



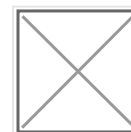
#### WB (Western Blot)

Western Blot analysis of Human Embryonic kidney epithelial cell line (HEK293T) lysate showing detection of GluN2B/NR2B protein using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody at 1:250.



#### IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Filaggrin-like staining, and dermal staining.



#### ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20 degree C. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Everything positive.

ADDITIONAL INFORMATION

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-Grin2b antibody | <b>Background Info:</b> Detects ~166kDa. No cross-reactivity against NR2A<br><br><b>Scientific Background:</b> NR2B containing receptors have been implicated in synaptic plasticity, memory formation and pain modulation (3). Studies suggest that the NR2B subunit of glutamate receptors may be potential targets for relieving pain; NR2B may be a probable target for anti-nociceptive drugs, and may also be useful as analgesics (4). |
| Product Categories/Family for anti-Grin2b antibody   | <a href="#">Ion Channels</a> ; <a href="#">Neuroscience</a>                                                                                                                                                                                                                                                                                                                                                                                   |
| References                                           | 1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.: Sunderland, MA USA. 2. www.iochannels.org 3. Zhuo M. (2009) Mol Brain. 2(1): 4 4. Gurwitz D, and Weizman A. (2002) Drug Discovery Today, 7(7): 403-406.                                                                                                                                                                                             |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | <a href="#">6980984</a>                                                                                                                                                              |
| NCBI GeneID                      | <a href="#">24410</a>                                                                                                                                                                |
| NCBI Accession #                 | <a href="#">NP_036706.1</a>                                                                                                                                                          |
| NCBI GenBank Nucleotide #        | <a href="#">NM_012574.1</a>                                                                                                                                                          |
| UniProt Accession #              | <a href="#">Q00960</a> ; <a href="#">Q62684</a>                                                                                                                                      |
| Molecular Weight                 | 166,071 Da                                                                                                                                                                           |
| NCBI Official Full Name          | glutamate receptor ionotropic, NMDA 2B                                                                                                                                               |
| NCBI Official Synonym Full Names | glutamate receptor, ionotropic, N-methyl D-aspartate 2B                                                                                                                              |
| NCBI Official Symbol             | Grin2b                                                                                                                                                                               |
| NCBI Official Synonym Symbols    | GluN2B                                                                                                                                                                               |
| NCBI Protein Information         | glutamate receptor ionotropic, NMDA 2B; NR2B; NMDAR2B; glutamate receptor, ionotropic, NMDA2B; N-methyl D-aspartate receptor subtype 2B; glutamate [NMDA] receptor subunit epsilon-2 |
| UniProt Protein Name             | Glutamate receptor ionotropic, NMDA 2B                                                                                                                                               |
| UniProt Gene Name                | <b>Grin2b</b>                                                                                                                                                                        |
| UniProt Synonym Gene Names       | GluN2B; NMDAR2B; NR2B                                                                                                                                                                |
| UniProt Entry Name               | NMDE2_RAT                                                                                                                                                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.