

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse GRIN1/NMDAR1 in direct ELISAs. |
| Source | Monoclonal Rat IgG _{2A} Clone # 1031915 |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse GRIN1/NMDAR1 Met1-Gln559 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

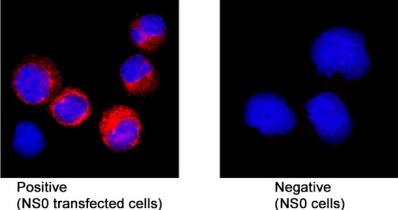
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---|----------------------------------|---|
| Immunocytochemistry | 8-25 µg/mL | Immersion fixed NS0 mouse myeloma cell line transfected with mouse GRIN1/NMDAR1 |
| Intracellular Staining by Flow Cytometry | 0.25 µg/10 ⁶ cells | NS0 cells transfected with Mouse GRIN1/NMDAR1 |

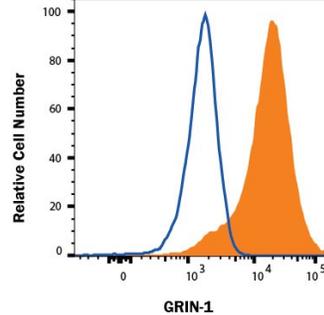
DATA

Immunocytochemistry



GRIN1/NMDAR1 in NS0 Mouse Cell Line Transfected with Mouse GRIN1/NMDAR1. GRIN1/NMDAR1 was detected in immersion fixed NS0 mouse myeloma cell line transfected with mouse GRIN1/NMDAR1 (positive staining) and NS0 mouse myeloma cell line (wild type, negative control) using Rat Anti-Mouse GRIN1/NMDAR1 Monoclonal Antibody (Catalog # MAB10655) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

Intracellular Staining by Flow Cytometry



Detection of Mouse GRIN1/NMDAR1 in NS0 cells transfected with Mouse GRIN1/NMDAR1 by Flow Cytometry. NS0 cells transfected with mouse GRIN1/NMDAR1 (filled histogram) or irrelevant protein (open histogram) were stained with Rat Anti-Mouse GRIN1/NMDAR1 Monoclonal Antibody (Catalog # MAB10655) or Rat IgG2A Isotype Control Antibody (Catalog # MAB006, data not shown) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012).

PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Grin-1 is a critical component of NMDA receptors. Expressed in the brain, these components play a key role in plasticity of synapses, which is believed to underlie memory and learning. Missense variants of the receptor components cause similar syndromes with varying severity of intellectual impairment, autism, epilepsy, and motor dysfunction. In Mice with reduced NMDA receptor activity, schizophrenia-like behaviors are revealed.