

Datasheet for ABIN2483989

**anti-Metabotropic Glutamate Receptor 5 antibody (AA 824-1203) (Atto 488)**[Go to Product page](#)**3** Images

## Overview

|                      |                                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Quantity:            | 100 µg                                                                                                                          |
| Target:              | Metabotropic Glutamate Receptor 5 (GRM5)                                                                                        |
| Binding Specificity: | AA 824-1203                                                                                                                     |
| Reactivity:          | Rat                                                                                                                             |
| Host:                | Mouse                                                                                                                           |
| Clonality:           | Monoclonal                                                                                                                      |
| Conjugate:           | This Metabotropic Glutamate Receptor 5 antibody is conjugated to Atto 488                                                       |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Immunocytochemistry (ICC) |

## Product Details

|                   |                                                                             |
|-------------------|-----------------------------------------------------------------------------|
| Immunogen:        | Fusion protein amino acids 824-1203 (cytoplasmic C-terminus) of rat mGluR5b |
| Clone:            | S75-3                                                                       |
| Isotype:          | IgG2a                                                                       |
| Specificity:      | Detects ~130 kDa (both mGluR1 and mGluR5).                                  |
| Cross-Reactivity: | Human, Mouse, Rat                                                           |
| Purification:     | Protein G Purified                                                          |

## Target Details

|         |                                          |
|---------|------------------------------------------|
| Target: | Metabotropic Glutamate Receptor 5 (GRM5) |
|---------|------------------------------------------|

## Target Details

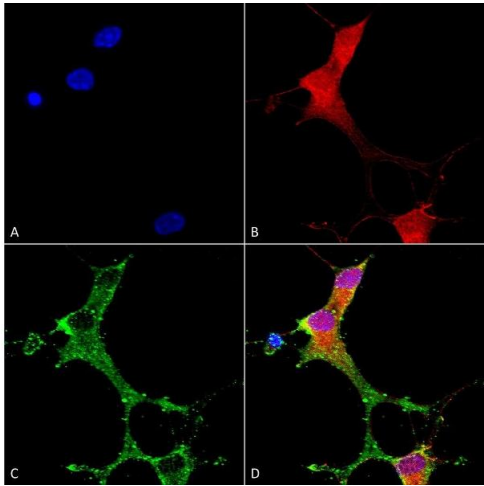
|                   |                                                                                                                                                                                                                                                                               |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative Name: | mGluR5 ( <a href="#">GRM5 Products</a> )                                                                                                                                                                                                                                      |
| Background:       | The AMPA receptor is a non-NMDA-type ionotropic transmembrane receptor for glutamate that mediates fast synaptic transmission in the CNS. AMPARs are composed of four types of subunits, designated as GluR1, GluR2, GluR3 and GluR4, which combine to form tetramers (1, 2). |
| Gene ID:          | 24418                                                                                                                                                                                                                                                                         |
| NCBI Accession:   | <a href="#">NP_058708</a>                                                                                                                                                                                                                                                     |
| UniProt:          | <a href="#">P31424</a>                                                                                                                                                                                                                                                        |
| Pathways:         | <a href="#">Regulation of G-Protein Coupled Receptor Protein Signaling</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 (1:1000)</li><li>• optimal dilutions for assays should be determined by the user.</li></ul>                                           |
| Comment:           | 1 µg/ml of ABIN2483989 was sufficient for detection of mGluR1/5 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                                                                                                                                                                                                             |

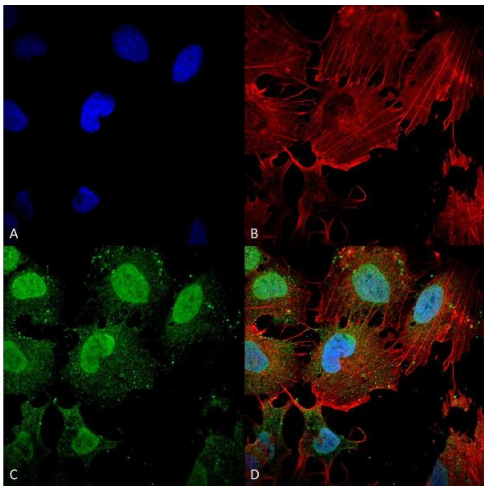
## Handling

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



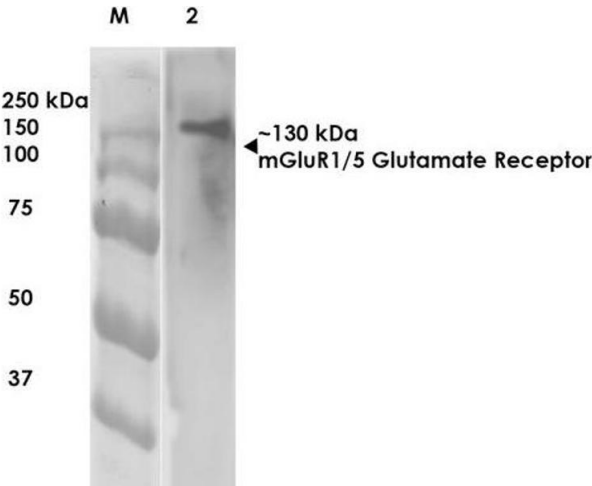
### Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-mGluR1/5 Monoclonal Antibody, Clone S75-3 (ABIN2483989). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-mGluR1/5 Monoclonal Antibody (ABIN2483989) 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) mGluR1/5 Antibody (D) Composite.



### Immunofluorescence (fixed cells)

**Image 2.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-mGluR1/5 glutamate receptor Monoclonal Antibody, Clone S75-3 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-mGluR1/5 glutamate receptor 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, Nucleus. Magnification: 60X.



### Western Blotting

**Image 3.** Western Blot analysis of Rat Brain Membrane showing detection of ~130 kDa mGluR5 protein using Mouse Anti-mGluR5 Monoclonal Antibody, Clone S75-33 . Lane 1: Molecular Weight (MW) Ladder. Lane 2: Rat Brain Membrane. Load: 10 µg. Block: 5% milk. Primary Antibody: Mouse Anti-mGluR5 Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: TMB solution for 10 min at RT. Predicted/Observed Size: ~130 kDa.