Datasheet for ABIN1686628

anti-Metabotropic Glutamate Receptor 5 antibody (AA 824-1203)

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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 un-conjugated
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

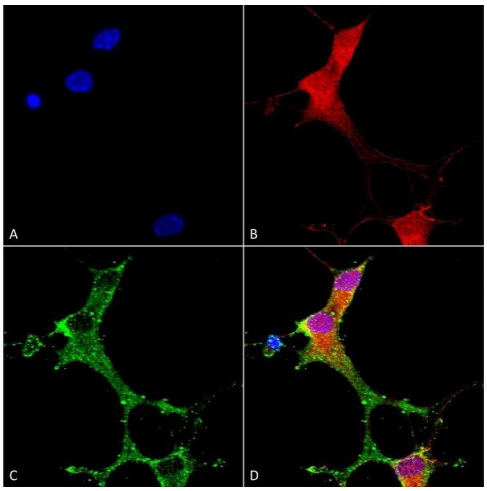
Alternative Name:	mGluR5 (GRM5 Products)
Background:	The AMPA receptor is a non-NMDA-type ionotropic transmembrane receptor for glutamate that mediates fast synaptic transmission in the CNS. AMPARs are composed of four types of subunits, designated as GluR1, GluR2, GluR3 and GluR4, which combine to form tetramers (1, 2).
Gene ID:	24418
NCBI Accession:	NP_058708
UniProt:	P31424
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Application Notes:	• WB (1:1000) • IHC (1:1000) • ICC/IF (1:1000) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN1686628 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

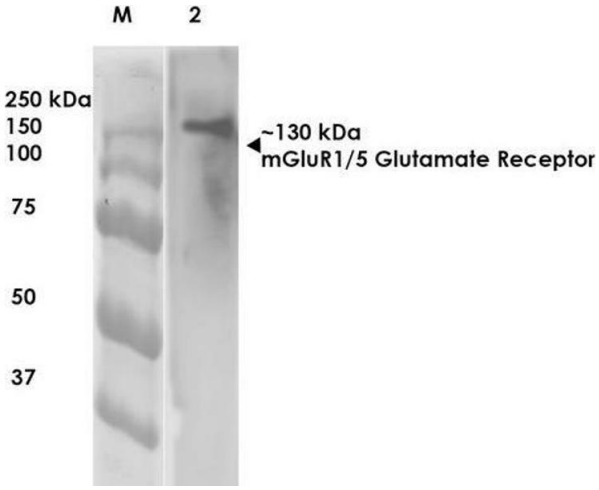
Handling

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:	-20 °C
Storage Comment:	-20°C



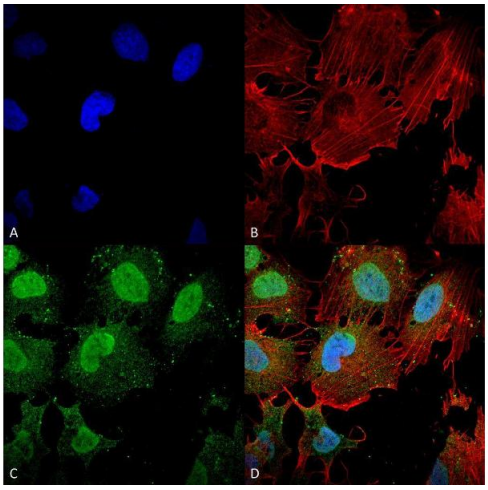
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-mGluR1/5 Monoclonal Antibody, Clone S75-3 (ABIN1686628). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-mGluR1/5 Monoclonal Antibody (ABIN1686628) 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.



Western Blotting

Image 2. 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.



Immunofluorescence (fixed cells)

Image 3. 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.

