



Datasheet for ABIN6658205

anti-GRM1a / GRM5 antibody (C-Term)



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1 Image

Overview

Quantity:	100 µL
Target:	GRM1a / GRM5 (GRM5/1a)
Binding Specificity:	C-Term
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Immunogen: Anti-mGluR5/1a Antibody was produced in rabbit by repeated immunizations with synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH. Immunogen Type: Peptide
Isotype:	IgG
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Cross-Reactivity (Details):	Cross reactivity with mGluR5/1a from other species has not been determined.
Purification:	Anti-mGluR5/1a antibody is directed against GluR5/1a. GluR5/1a antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Immunolabeling is blocked by preadsorption of antibody with the peptide used as antigen to generate the antibody. The antibody is a total IgG fraction. Expect reactivity with the following species based on sequence homology: human, mouse, rat.

Target Details

Target: GRM1a / GRM5 (GRM5/1a)

Alternative Name: mGluR5/1a ([GRM5/1a Products](#))

Background: Synonyms: mGluR5, Metabotropic Glutamate Receptor 5/1a
Background: mGluR5/1a antibody detects GluR5/1a protein. The metabotropic glutamate receptors (mGluRs) are key receptors in the modulation of excitatory synaptic transmission in the central nervous system. They are implicated in many forms of neural plasticity as well as learning and memory and drug abuse. Group I metabotropic glutamate receptors (consisting of mGluR1 and mGluR5) are G-protein-coupled neurotransmitter receptors that are localized in the perisynaptic region of the postsynaptic membrane. When activated, Group I mGluRs lead to stimulation of phospholipase and activation of Protein Kinase C. In contrast, activation of Group II metabotropic receptors (mGluR2 and mGluR3) leads to inhibition of adenylate cyclase. The mGluR1 receptor may also be critically involved in limiting the deleterious effects of excitotoxicity. In contrast, the mGluR5 receptor appears to be essential for late phase LTP in area CA1 of the hippocampus. mGluR5/1a is ideal for investigators involved neuronal circuitry and more generally in Neuroscience.
Gene Name: GRM5

Gene ID: 24418

UniProt: [P31424](#)

Application Details

Application Notes: Immunohistochemistry Dilution: 1:500
Application Note: Anti-mGluR5/1a (Rabbit) antibody is suitable for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 125 kDa monomer and 250 kDa dimer in size corresponding to mGluR5 and mGluR1 proteins in the appropriate cell lysate or extract.
Western Blot Dilution: 1:1000

Restrictions: For Research Use only

Handling

Format: Liquid

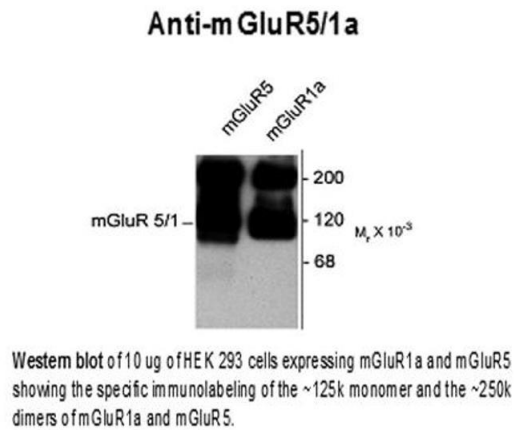
Buffer: 0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer: 0.1 mg/mL Bovine Serum Albumin (BSA) - IgG and Protease free, 50 % (v/v) Glycerol

Handling

Storage: 4 °C, -20 °C

Storage Comment: Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

Images



Western Blotting

Image 1. Western blot of Anti-mGluR5/1a (Rabbit) Antibody - 612-401-D77 Western Blot of Rabbit Anti-metabotropic glutamate receptors (mGluR) 5/1a antibody. Lane 1: HEK 293 cells expressing mGluR5. Lane 2: HEK 293 cells expressing mGluR1a. Load: 10 µg per lane. Primary antibody: mGluR5/1a antibody at 1:400 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~125kDa monomer and the ~250kDa dimers of mGluR1a and mGluR5. Other band(s): none.