

Datasheet for 600-401-D75**mGluR1a Antibody****Overview**

Description:	Anti-mGluR1a (RABBIT) Antibody - 600-401-D75
Item No.:	600-401-D75
Size:	100 µL
Applications:	WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	mGluR1a antibodies detect GluR1a. GluR1a is 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. Therefore, mGluR1a antibody is ideal for investigators involved in neuronal plasticity, cell signaling and neuroscience.
Synonyms:	mGluR1, Metabotropic Glutamate Receptor 1a
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Grm1
Reactivity:	Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-mGluR1a Antibody was produced in rabbit by repeated immunizations with synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.
Purity/Specificity:	Anti-mGluR1a antibodies are affinity purified from monospecific antiserum by immunoaffinity purification. Immunolabeling blocked by preadsorption of antibody with the peptide used to generate the antibody. This antibody is directed against rat mGluR1a. Reactivity is expected from mouse. Cross reactivity from other sources has not been determined.
Relevant Links:	• UniProtKB - P23385 • GeneID - 24414 • UniProtKB - P23385.1

Application Details

Tested Applications:	WB
Application Note:	Anti-mGluR1a antibody is tested for use in Western Blotting and IHC. Expect a band of approximately 125 kDa monomer and 250 kDa mGluR1a dimer in the appropriate cell lysate or extract. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:500
WB:	1:1000

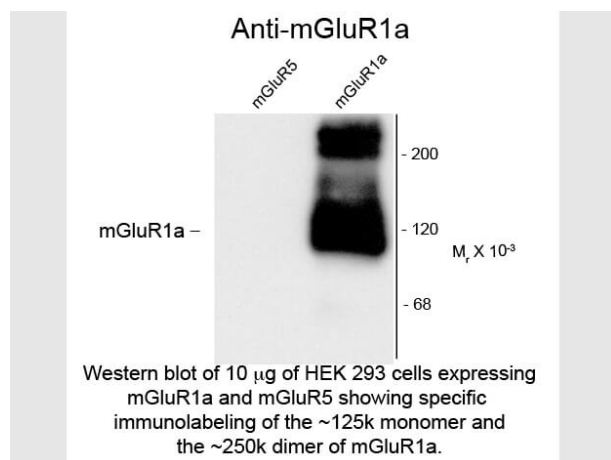
Formulation

Physical State:	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

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit Anti-metabotropic glutamate receptors (mGluR) 1a antibody. Lane 1: HEK 293 cells expressing mGluR5. Lane 2: HEK 293 cells expressing mGluR1a. Load: 10 μ g per lane. Primary antibody: mGluR1a antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~125k monomer and the ~250k dimer of mGluR1a. Other band(s): No reactivity toward mGluR5.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.