

Anti-Metabotropic Glutamate Receptor 1a Antibody

Our Anti-Metabotropic Glutamate Receptor 1a primary antibody from PhosphoSolutions is rabbit polyclo Catalog # AN1452

Specification

Anti-Metabotropic Glutamate Receptor 1a Antibody - Product Information

| Application | WB |
|-------------------|---------------|
| Primary Accession | <u>P23385</u> |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | lgG |
| Calculated MW | 133236 |

Anti-Metabotropic Glutamate Receptor 1a Antibody - Additional Information

Gene ID

24414

Other Names

Glutamate receptor metabotropic 1 antibody, GPRC1A antibody, GRM1 alpha antibody, GRM1 antibody, GRM1_HUMAN antibody, Metabotropic glutamate receptor 1 antibody, MGLU1 antibody, mGluR1 antibody, SCAR13 antibody

Target/Specificity

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 (Bhattacharya et al., 2004; Francesconi et al., 2004; Wilson and Nicoll, 2001). 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 (Blaabjerg et al., 2003).

Dilution WB~~1:1000

Format Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Metabotropic Glutamate Receptor 1a Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice



Anti-Metabotropic Glutamate Receptor 1a Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Metabotropic Glutamate Receptor 1a Antibody - Images



Western blot of 10 μ g of HEK 293 cells expressing: 1) mGluR5 and 2) mGluR1a. Specific immunolabeling of the ~125 kDa monomer and the ~250 kDa dimer of mGluR1a is shown in the second lane (2). Specificity is confirmed in the first lane (1), as the mGluR1a antibody shows no reactivity toward mGluR5.

Anti-Metabotropic Glutamate Receptor 1a Antibody - Background

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 (Bhattacharya et al., 2004; Francesconi et al., 2004; Wilson and Nicoll, 2001). 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 (Blaabjerg et al., 2003).