

Anti-Metabotropic Glutamate Receptor 5/1a Antibody
Our Anti-Metabotropic Glutamate Receptor 5/1a primary antibody from
PhosphoSolutions is rabbit polyc
Catalog # AN1453

Specification

Anti-Metabotropic Glutamate Receptor 5/1a Antibody - Product Information

Application	WB
Primary Accession	P31424
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	131885

Anti-Metabotropic Glutamate Receptor 5/1a Antibody - Additional Information

Gene ID **24418**

Other Names

glutamate receptor metabotropic 5, GPRC1EMGLUR5metabotropic glutamate receptor 5, mGlu5, mGluR5

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). In contrast, the mGluR5 receptor appears to be essential for late phase LTP in area CA1 of the hippocampus (Francesconi et al., 2004).

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 5/1a Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

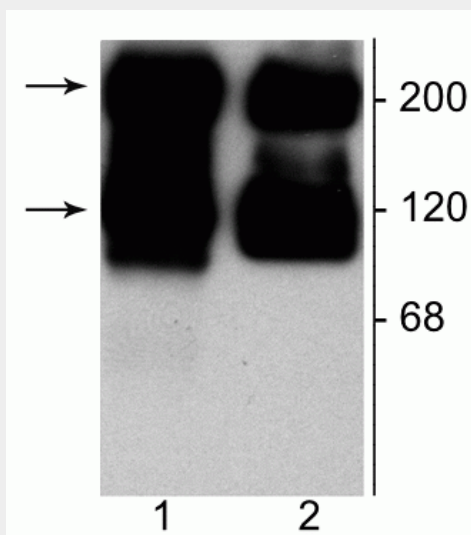
Blue Ice

Anti-Metabotropic Glutamate Receptor 5/1a Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Metabotropic Glutamate Receptor 5/1a Antibody - Images



Western blot of 10 µg of HEK 293 cells expressing: 1) mGluR5 and 2) mGluR1a showing the specific immunolabeling of the ~125 kDa monomer and the ~250 kDa dimers of both mGluR1a (2) and mGluR5 (1).

Anti-Metabotropic Glutamate Receptor 5/1a 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). In contrast, the mGluR5 receptor appears to be essential for late phase LTP in area CA1 of the hippocampus (Francesconi et al., 2004).