10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP6343a

Specification

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q14832

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 2913

Other Names
Metabotropic glutamate receptor 3, mGluR3, GRM3, GPRC1C, MGLUR3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6343a was selected from the C-term region of human GPRC1C. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Protein Information

Name GRM3

Synonyms GPRC1C, MGLUR3

Function
G-protein coupled receptor for glutamate. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors. Signaling inhibits adenylate cyclase activity.

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Detected in brain cortex, thalamus, subthalamic nucleus, substantia nigra, hypothalamus, hippocampus, corpus callosum, caudate nucleus and amygdala.

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Images

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - Background

L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors, that have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group I includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3 (also known as GPRC1C) while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their agonist selectivities. The activity of GRM3 is mediated by a G-protein that inhibits adenylate cyclase activity.

Metabotropic Glutamate Receptor 3 Antibody (C-term) Blocking peptide - References

Aronica, E., et al., Neuroscience 130(4):927-933 (2005).Egan, M.F., et al., Proc. Natl. Acad. Sci. U.S.A. 101(34):12604-12609 (2004).Yao, Y., et al., Biochem. Biophys. Res. Commun. 319(2):622-628 (2004).Aronica, E., et al., Eur. J. Neurosci. 17(10):2106-2118 (2003).Scherer, S.W., et al., Science 300(5620):767-772 (2003).