

Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP6344a**Specification**

Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q14833](#)**Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 2914**Other Names**

Metabotropic glutamate receptor 4, mGluR4, GRM4, GPRC1D, MGLUR4

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6344a](/product/products/AP6344a) was selected from the C-term region of human GPRC1D. 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 4 Antibody (C-term) Blocking peptide - Protein Information**Name** GRM4**Synonyms** GPRC1D, MGLUR4**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

Strongly expressed in the cerebellum. Expressed at low levels in hippocampus, hypothalamus and thalamus. No expression detected in liver.

Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide - Images**Metabotropic Glutamate Receptor 4 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 while Group III includes GRM4 (also known as GPRC1D), 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 GPRC1D is mediated by a G-protein that inhibits adenylate cyclase activity.

Metabotropic Glutamate Receptor 4 Antibody (C-term) Blocking peptide - References

Hermit, M.B., et al., J. Biol. Chem. 279(33):34811-34817 (2004). Collard, C.D., et al., J. Biol. Chem. 277(17):14801-14811 (2002). Scherer, S.W., et al., Genomics 31(2):230-233 (1996). Gomez, J., et al., Mol. Pharmacol. 50(4):923-930 (1996). Flor, P.J., et al., Neuropharmacology 34(2):149-155 (1995).