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GRM4 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP13750a

Specification

GRM4 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q14833

GRM4 Antibody (N-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 AP13750a was selected from the N-term region of GRM4. 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.

GRM4 Antibody (N-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.

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GRM4 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

GRM4 Antibody (N-term) Blocking peptide - Images

GRM4 Antibody (N-term) Blocking peptide - Background

L-glutamate is the major excitatory neurotransmitter inthe central nervous system and activates both ionotropic andmetabotropic glutamate receptors. Glutamatergic neurotransmissionis involved in most aspects of normal brain function and can beperturbed in many neuropathologic conditions. The metabotropicglutamate receptors are a family of G protein-coupled receptors,that have been divided into 3 groups on the basis of sequencehomology, putative signal transduction mechanisms, andpharmacologic properties. Group I includes GRM1 and GRM5 and thesereceptors have been shown to activate phospholipase C. Group IIincludes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7and GRM8. Group II and III receptors are linked to the inhibitionof the cyclic AMP cascade but differ in their agonistselectivities.

GRM4 Antibody (N-term) Blocking peptide - References

Muhle, H., et al. Epilepsy Res. 89 (2-3), 319-326 (2010) :Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)Yosifova, A., et al. J Affect Disord 117 (1-2), 87-97 (2009) :Need, A.C., et al. Eur. J. Hum. Genet. 17(7):946-957(2009)Shibata, H., et al. Psychiatry Res 167 (1-2), 88-96 (2009) :