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Metabotropic Glutamate Receptor 3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6343a

Product Information

Application	WB, E
Primary Accession	Q14832
Other Accession	Q1ZZH1
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4623
Calculated MW	98879
Antigen Region	828-857

Additional Information

Gene ID	2913
Other Names	Metabotropic glutamate receptor 3, mGluR3, GRM3, GPRC1C, MGLUR3
Target/Specificity	This Metabotropic Glutamate Receptor 3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 828-857 amino acids from the C-terminal region of human Metabotropic Glutamate Receptor 3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Metabotropic Glutamate Receptor 3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

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.

References

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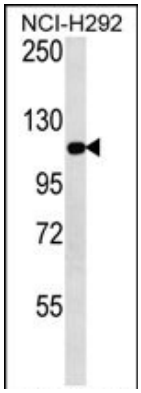
Egan, M.F., et al., Proc. Natl. Acad. Sci. U.S.A. 101(34):12604-12609 (2004).
Yao, Y., et al., Biochem. Biophys. Res. Commun. 319(2):622-628 (2004).
Aronica, E., et al., Eur. J. Neurosci. 17(10):2106-2118 (2003).
Scherer, S.W., et al., Science 300(5620):767-772 (2003).

Images



GPRC1C Antibody (R841) (Cat. #AP6343a) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the GPRC1C antibody detected the GPRC1C protein (arrow).