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GRM2 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant GRM2.
Catalog # AT2264a

Product Information

Application	E
Primary Accession	Q14416
Other Accession	NM_000839
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3H7
Calculated MW	95568

Additional Information

Gene ID	2912
Other Names	Metabotropic glutamate receptor 2, mGluR2, GRM2, GPRC1B, MGLUR2
Target/Specificity	GRM2 (NP_000830, 414 a.a. ~ 506 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	GRM2 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

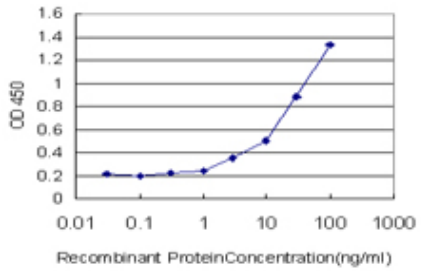
Background

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, 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. Two transcript variants encoding different isoforms have been found for this gene.

References

Association analysis of GRM2 and HTR2A with methamphetamine-induced psychosis and schizophrenia in the Japanese population. Tsunoka T, et al. Prog Neuropsychopharmacol Biol Psychiatry, 2010 May 30. PMID 20211215.Elevated level of metabotropic glutamate receptor 2/3 in the prefrontal cortex in major depression. Feyissa AM, et al. Prog Neuropsychopharmacol Biol Psychiatry, 2010 Mar 17. PMID 19945495.Disruption of glutamate receptors at Shank-postsynaptic platform in Alzheimer's disease. Gong Y, et al. Brain Res, 2009 Oct 6. PMID 19635471.Mutagenesis and molecular modeling of the orthosteric binding site of the mGlu2 receptor determining interactions of the group II receptor antagonist (3)H-HYDIA. Lundstr?m L, et al. ChemMedChem, 2009 Jul. PMID 19402024.Association analysis of group II metabotropic glutamate receptor genes (GRM2 and GRM3) with mood disorders and fluvoxamine response in a Japanese population. Tsunoka T, et al. Prog Neuropsychopharmacol Biol Psychiatry, 2009 Aug 1. PMID 19386277.

Images



Detection limit for recombinant GST tagged GRM2 is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.