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Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6345a

Specification

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - Product Information

Application	**WB,E**
Primary Accession	P41594
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1020-1050**

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - Additional Information

Gene ID 2915

Other Names
Metabotropic glutamate receptor 5, mGluR5, GRM5, GPRC1E, MGLUR5

Target/Specificity
This Metabotropic Glutamate Receptor 5 (GPRC1E) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1020-1050 amino acids from the C-terminal region of human Metabotropic Glutamate Receptor 5 (GPRC1E).

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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 5 (GPRC1E) Antibody (C-term T1003) is for research use only and not for use in diagnostic or therapeutic procedures.

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - Protein Information

Name GRM5

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Synonyms GPRC1E, MGLUR5

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 activates a phosphatidylinositol- calcium second messenger system and generates a calcium-activated chloride current. Plays an important role in the regulation of synaptic plasticity and the modulation of the neural network activity.

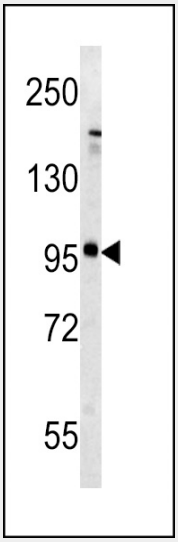
Cellular Location
Cell membrane; Multi-pass membrane protein

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - Images



Western blot analysis of Metabotropic Glutamate Receptor 5 (GPRC1E) antibody (C-term T1003) (Cat.# AP6345a) in mouse brain tissue lysates (35ug/lane). Metabotropic Glutamate Receptor 5 (arrow) was detected using the purified Pab.

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - 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 (also known as GPRC1E) 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. The activity of GRM5 is mediated by a G-protein that activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current.

Metabotropic Glutamate Receptor 5 (GPRC1E) Antibody (C-term T1003) - References

Pacheco, R., et al., J. Biol. Chem. 279(32):33352-33358 (2004).
Anneser, J.M., et al., Neuroreport 15(2):271-273 (2004).
Uchino, M., et al., J. Biol. Chem. 279(3):2254-2261 (2004).
Corti, C., et al., J. Biol. Chem. 278(35):33105-33119 (2003).
Aronica, E., et al., Eur. J. Neurosci. 17(10):2106-2118 (2003).