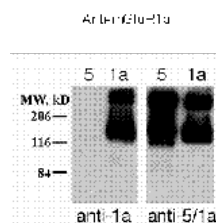




Metabotropic Glutamate Receptor 1a Antibody

CATALOG NUMBER: 50-101



Western blot of 10µg of HEK 293 cells expressing mGluR1a and mGluR5 showing specific immunolabeling of the ~125k monomer and the ~250k dimer of mGluR1a.

Specifications

SPECIES REACTIVITY:	Rat
TESTED APPLICATIONS:	IHC, WB
APPLICATIONS:	Metabotropic Glutamate Receptor 1a antibody allows for strong and specific immunolabeling of ~125k mGluR1a and the ~250k mGluR1a dimer in Western blots of rat brain at antibody dilution of 1:1000. Immunolabeling blocked by preadsorption of antibody with the C-terminal peptide immunogen. Applications include Dot Blots (DB), Immunohistochemistry (IHC) and Western Blots (WB). Rabbit anti-mGluR recognizes mGluR1a in rat brain. When internally tested under ideal conditions the working dilutions were 1:500 for IHC and 1:1000 for DB and WB.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	125/250
IMMUNOGEN:	mGluR 1a polyclonal antibody was raised against a peptide from the C-terminal region of mGluR1a.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Affinity Purified
PHYSICAL STATE:	Liquid
BUFFER:	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
STORAGE CONDITIONS:	Metabotropic Glutamate Receptor 1a antibody can be stored at -20°C. After reconstitution in 50 ul PBS, the antibody should be aliquot and stored at -20°C. This product is stable at -20°C for at least 1 year.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	Gprc1a, Gprc1a, Mglur1,
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ACCESSION NO.:	P23385
PROTEIN GI NO.:	121300
OFFICIAL SYMBOL:	Grm1
GENE ID:	24414

Background

BACKGROUND: The metabotropic glutamate receptors (mGluRs) are key receptors in the modulation of excitatory synaptic transmission in the central nervous system. They are implicated in many forms of neural plasticity as well as learning and memory and drug abuse. Group I metabotropic glutamate receptors (consisting of mGluR1 and mGluR5) are G-protein-coupled neurotransmitter receptors that are localized in the perisynaptic region of the postsynaptic membrane. When activated, Group I mGluRs lead to stimulation of phospholipase and activation of Protein Kinase C. In contrast activation of Group II metabotropic receptors (mGluR2 and mGluR3) leads to inhibition of adenylate cyclase.

- REFERENCES:**
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 - 2) Rammes, G., Palmer, M., Eder, M., Dodt, H.U., Zieglgansberger, W. and Collingridge, G.L., "Activation of mGlu receptors induces LTD without affecting postsynaptic sensitivity of CA1 neurons in rat hippocampal slices," *J. Physiol* 546 (2003) 455 - 460.
 - 3) Ferré, S., Karcz-Kubicha, M., Hope, B.T., Popoli, P., Burgueño, J., Gutiérrez, M.S., Casadó, V., Fuxe, K., Goldberg, S.R., Lluís, C. Franco, R. and Ciruela, F., "Synergistic interaction between adenosine A2A and glutamate mGlu5 receptors: Implications for striatal neuronal function," *Proc. Natl. Acad. Sci. USA* 99 (2002) 11,940-11,945.
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FOR RESEARCH USE ONLY

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