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AP05199PU-N Polyclonal Antibody to mGluR2/3 - Aff - Purified

Alternate names: GRM2, GRM3, Metabotropic glutamate receptor 2, Metabotropic glutamate receptor

2/3, Metabotropic glutamate receptor 3, mGlu 2, mGlu 3, mGlu2

Quantity: 10 Blots
Concentration: Lot specific

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 (Bhattacharya et al., 2004; Francesconi et al., 2004; Wilson and Nicoll, 2001). 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. The mGluR2 subunit has been shown to be required for long-term potentiation at the mossy fiber input in the hippocampus (Yokoi et al., 1996).

Host / Isotype: Rabbit / IgG

Immunogen: Synthetic peptide derived from the C-terminal of the mGluR2 and mGluR3.

Format: State: Liquid purified Ig

Buffer System: HEPES (pH 7.5) solution containing 150 mM NaCl, 100 µg per ml BSA

and 50% glycerol

Applications: Western Blot: 1:1000.

Immunohistochemistry on frozen sections: 1:500.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody reacts to Metabotropic Glutamate Receptor 2/3 (mGluR2/3).

Species: Rat.

Other species not tested.

Storage: Ship on dry ice. Store (in aliquots) at -20°C to -70°C.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Bhattacharya M, Babwah AV, Godin C, Anborgh PH, Dale LB, Poulter MO, Ferguson

SSG (2004)

Ral and phospholipase D2-dependent pathway for constitutive metabotropic

glutamate receptor

endocytosis. J Neurosci 24:8752-8761.

2. Blaabjerg M, Fang LW, Zimmer J, Baskys A (2003) Neuroprotection against NMDA

excitotoxicity by group I metabotropic glutamate receptors is associated with

reduction of NMDA stimulated currents. Exp Neurol 183:573 - 580.

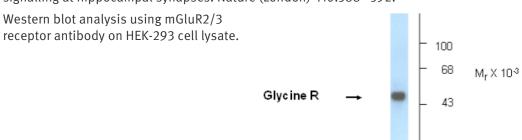
3. Francesconi W, Cammalleri M, Sanna PP (2004) The metabotropic glutamate receptor 5 is necessary for late-phase long-term potentiation in the hippocampal CA1



region. Brain Res 1022:12 - 18.

4. Wilson RI, Nicoll RA (2001) Endogenous cannabinoids mediate retrograde signalling at hippocampal synapses. Nature (London) 410:588 - 592.

Pictures:



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