

Anti- Metabotropic Glutamate Receptor 2/3

CATALOG NO.: XPS-2017

FORM: Affinity Purified

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.

SOURCE:

Rabbit anti-mGluR 2/3 polyclonal antibody was raised against a peptide from the C-terminal region of mGluR2 and mGluR3. Rabbit anti-mGluR 2/3 by affinity purified on a column made with the peptide used as the antigen.

APPLICATION:

This polyclonal antibody allows for strong and specific immunolabeling of ~125k mGluR5 and mGluR1a and the ~250k mGluR5 and mGluR1a dimers 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). Recognizes both mGluR5 and 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.

Anti-mGluR2/3

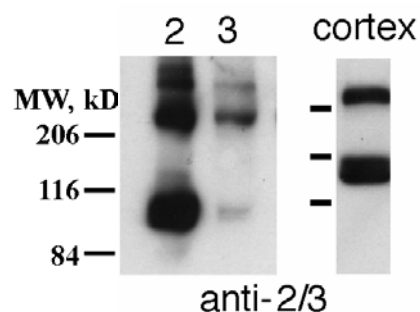


Figure: Western blot of 10 µg of HEK 293 cells expression either mGluR2 or mGluR3. As shown in the autoradiograph, the mGluR2/3 antibody recognizes both mGluR2 and mGluR3 labeling the ~110k monomer and the

~220k dimer for both recombinant mGluRs. Also shown is the specific immunolabeling of the monomer and dimer in Western blots of a rat cortex lysate. **This product is for research use only.**

STORAGE:

It is supplied as affinity purified polyclonal antibody, 100 μ l antibody per vial in 200 mM Tris/glycine buffer, pH 7.5, and 0.1% sodium azide, and there is an adequate amount of material to conduct 10-mini Western Blots. For long term storage -80°C is recommended, but shorter term storage at -20°C is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20°C .

REFERENCES:

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