

**Antibody to Metabotropic Glutamate Receptor 2 (mGluR2)
MOUSE MONOCLONAL**

Catalog Number: AB-N32
Quantity: 100 micrograms
Format: PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4), no preservative. Sterile filtered.
Host: Mouse
Clone: mG2Na-s
Immunogen: GST-fusion with a 47-amino acid sequence of mGluR2

Background:

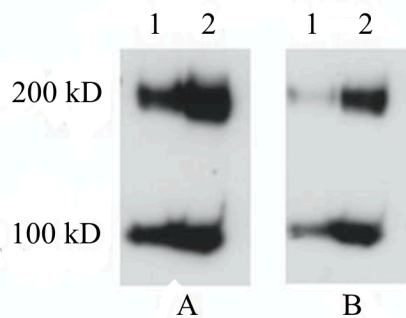
The metabotropic glutamate receptors (mGluR) play diverse roles in brain function and pathology. Eight mGluR's have been cloned thus far, they have been separated into three subgroups according to sequence homology, intracellular second messengers, and ligand selectivities. mGluR2 and mGluR3 are the mGluR's that react most potently with trans-1-aminocyclopentane-1,3-dicarboxylate.

Specificity and Preparation:

This antibody recognizes the metabotropic glutamate receptor 2, but not metabotropic glutamate receptor 3, in rat and mouse. The antibody was made against a GST-fusion with a 47-amino acid sequence against the C-terminal portion of mGluR2.

Usage and Storage:

Applications include immunoblotting (western, 1 μ g/ml)¹, immunohistochemistry (1 μ g/ml)¹, immunostaining (1 μ g/ml)¹, and immunofluorescence (1 μ g/ml)². The material should be stored at -20°C. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.



Lane 1 - 5 μ g
Lane 2 - 25 μ g
Blot A - 1:500 dilution
Blot B - 1:2,000 dilution

Rat cortical tissue extracts were run on SDS-PAGE. Anti-mGluR2 was applied to blot A at a 1:500 dilution, and blot B at 1:2,000. Both blots were incubated with an anti-mouse-HRP secondary antibody at 1:10,000. The protein was run under reducing conditions (40 mM DTT); both monomer and dimer forms of mGluR2 are recognized. Data provided by Marek Schwendt

References:

1. Neki A, Ohishi H, Kaneko T, Shigemoto R, Nakanishi S, Mizuno N (1996) Pre- and postsynaptic localization of a metabotropic glutamate receptor, mGluR2, in the rat brain: an immunohistochemical study with a monoclonal antibody. *Neurosci Lett* 202 (3):197-200.
2. Neki A, Ohishi H, Kaneko T, Shigemoto R, Nakanishi S, Mizuno N (1996) Metabotropic glutamate receptors mGluR2 and mGluR5 are expressed in two non-overlapping populations of Golgi cells in the rat cerebellum. *Neuroscience* 75 (3):815-826.

To view protocol(s) for this and other products please visit: www.ATSBio.com/protocols