

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

Catalog Number: AB-N32
Quantity: 50 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
Isotype: IgG
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 & Preparation: This antibody recognizes the metabotropic glutamate receptor 2, but not metabotropic glutamate receptor 3, in rat, mouse and human. The antibody was made against a GST-fusion with a 47-amino acid sequence against the N-terminal portion of mGluR2.

Usage: 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.

Storage: The material should be stored at -20°C. Avoid repeated freezing and thawing. Gently spin down material 5-10 seconds in a microfuge before use.



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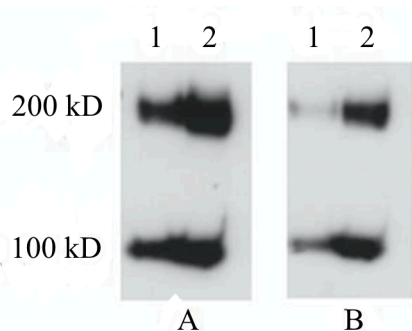


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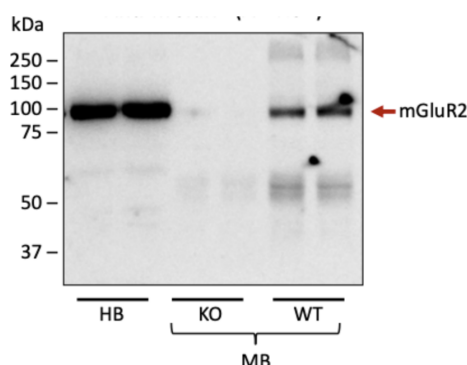
1. Neki A, Ohishi H, Kaneko T, Shigemoto R, Nakanishi S, Mizuno N (1996) Pre- and postsynaptic localization of a metabotropic glutamate receptor, mGluR2, in the rat brain: an immunohistochemical study with a monoclonal antibody. *Neurosci Lett* 202(3):197-200.
2. Neki A, Ohishi H, Kaneko T, Shigemoto 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.

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Lane 1 - 5 µg
Lane 2 - 25 µg
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



Human prefrontal cortex (HB) and mouse whole cortex (MB) were run on Tris-glycine gels. MB consists of mGluR2 knockout mice (KO) and Wild type littermates (WT). Anti-mGluR2 was applied at a dilution of 1:2000. Secondary goat anti-mouse HRP antibody was used at 1:5000. AB-N32 recognizes an immunoreactive band of approximately 95 kDa in both human and WT mouse cortical samples. The band is not present in samples from mGluR2 knockouts. Data provided by Dr. Alfredo Ramos-Miguel, Laboratory of Neuropsychopharmacology – University of the Basque Country.