

Polyclonal Antibody to mGluR2/3 - Serum

Alternate names:	GRM2, GRM3, Metabotropic glutamate receptor 2, Metabotropic glutamate receptor 2/3, Metabotropic glutamate receptor 3, mGlu 2, mGlu 3, mGlu2
Catalog No.:	AP31114SU-N
Quantity:	0.1 ml
Background:	Metabotropic glutamate receptors (mGluRs) are G-protein coupled receptors activated by glutamate. Based on sequence similarity, transduction mechanisms and agonist potencies, mGluRs are subdivided into three groups: mGluR1/mGluR5, mGluR2/mGluR3, and mGluR4/mGluR6/mGluR7/mGluR8. mGluRs are widely distributed throughout the nervous system and are expressed by both neurons and glial cells. mGluRs have been suggested to play a variety of functional roles, among which is involvement in synaptic plasticity underlying learning and memory as well as chronic pain.
Host:	Rabbit
Immunogen:	NGREVDSTTSSL Corresponding to the carboxy-terminus of Rat mGluR2
Format:	State: Liquid Whole Serum Buffer System: Tris Glycine, pH 7.8 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer
Applications:	Immunohistochemistry: 1/30-1/100. Immunocytochemistry: 1/30-1/100. Western Blot: 1/250-1/500. See Protocols for more details. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes a conserved sequence in both Metabotropic Glutamate Receptor 2 and Metabotropic Glutamate Receptor 3. Species: Rat, Mouse. Other species not tested.
Storage:	Store the antibody undiluted (in aliquots) at -20°C Serum may have become trapped in top of vial during shipping. Centrifugation of vial is recommended before opening. Avoid repeated freezing and thawing. Shelf life: 6 months from despatch.
Caution:	Sodium Azide interferes with peroxidase reactions and should not be used with peroxidase methodologies. If Sodium Azide is present in any steps of the staining procedure, the tissue should thoroughly be rinsed with Sodium Azide-free buffer before performing the peroxidase reaction.

General Readings: 1. Tanabe, Y., Masu, M., Ishii, T., Shigemoto, R., and Nakanishi, S. (1992). A family of metabotropic glutamate receptors. *Neuron* 8 (1), 169-79.

Protocols: **Immunohistochemistry:** Antiserum was used on perfusion fixed tissue. Perfusion: 1) calcium-free Tyrode's solution, 2) paraformaldehyde-picric acid fixative, and 3) 10% sucrose in PBS as a cryo-protectant. Desired tissues were dissected and stored overnight in 10% sucrose in PBS.

Slide-mounted tissue sections were processed for **Indirect Immunofluorescence**. Slides were incubated with blocking buffer for 1 hour at room temperature. Primary antiserum was diluted with blocking buffer to the appropriate working concentration. Blocking buffer was removed and slides were incubated for 18-24 hours at 4°C with primary antiserum. Slides were rinsed 3 times and then incubated with secondary antibodies for 1 hour at room temperature. Slides were again rinsed 3 times and coverslipped. Staining was examined using fluorescence microscopy.

Pictures: Western blot analysis of Rat brain shows bands migrating at Mr=100,000 and 190,000 which may be a dimer of the smaller band. Tissue : Rat Cerebellar Membranes.

