3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Anti-Glutamate Receptor 1a, Metabotropic (mGluR1a)
produced in rabbit, affinity isolated antibody

Catalog Number **G9665**

Product Description

Anti-Glutamate Receptor 1a, Metabotropic (mGluR1a) is produced in rabbit using a synthetic peptide from the C-terminal region of rat mGluR1a (Gene ID: 24414), with N-appended lysine, coupled to thyroglobulin as immunogen. The antibody is purified using peptide-agarose.

Anti-Glutamate Receptor 1a, Metabotropic (mGluR1a) recognizes rat mGluR1a by immunoblotting and immunohistochemistry. Other species have not been tested. This antibody does not cross-react with other splice variants or mGluR5.

Glutamate is the main excitatory neurotransmitter in the brain. It acts on ligand-gated receptor channels--termed NMDA, AMPA and kainate receptors--involved in the fast excitatory synaptic transmission. Glutamate has also been shown to regulate ion channels and enzymes producing second messengers via specific receptors coupled to G-proteins, called metabotropic glutamate receptors. These receptors are important mediators of excitatory amino acid neurotransmission in the striatum.

Reagents

Supplied in 10 mM HEPES, pH 7.5, 150 mM NaCl, 100 µg/mL BSA and 50% glycerol.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

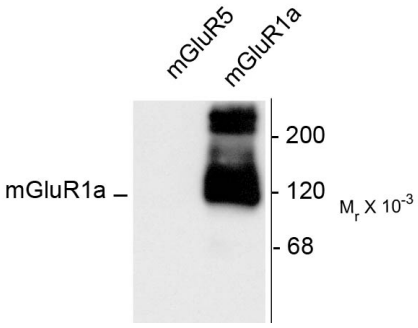
For extended storage freeze at –20 °C. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: recommended dilution is 1:1,000.
Immunohistochemistry: recommended dilution is 1:500.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations, we recommend determining optimal working dilutions by titration test.



Immunoblot

10 µg of HEK 293 cells expressing GluR1a and mGluR5 showing the specific immunolabeling of the ~125k monomer and the ~250k dimer of mGluR1a. The mGluR1a antibody shows no reactivity toward mGluR5

References

1. Tallaksen-Greene, S.J., et al., *Brain Res*. **780**, 210-217 (1998).
2. Pin, J-P., *Neuropharmacol*., **34**, 1-26 (1995).

AH,PHC 01/07-1