mGluR-2 (A-1): sc-271654

**BACKGROUND**

The mGluR proteins (metabotropic glutamate receptors) are members of the G protein-coupled receptor family and are functionally and pharmacologically distinct from the GluR proteins (ionotropic glutamate receptors). The eight currently known mGluR proteins are mediated by two G proteins with opposing regulation of adenylate cyclase pathways. The activities of mGluR-1 and mGluR-5 are mediated by a G protein that activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. The remainder of the eight subtypes of mGluR have an activity mediated by a G protein that inhibits adenylate cyclase activity. mGluR-2, which may interact with GRASP, acts as a receptor for glutamate. It may also be involved in the regulation of neurotransmission suppression and in synaptogenesis or synaptic stabilization.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GRM2 (human) mapping to 3p21.2; Gm2 (mouse) mapping to 9 F1.

**SOURCE**

mGluR-2 (A-1) is a mouse monoclonal antibody raised against amino acids 407-536 mapping within an internal region of mGluR-2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

mGluR-2 (A-1) is recommended for detection of mGluR-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for mGluR-2 siRNA (h): sc-61028, mGluR-2 siRNA (m): sc-61029, mGluR-2 shRNA Plasmid (h): sc-61028-SH, mGluR-2 shRNA Plasmid (m): sc-61028-SH, mGluR-2 shRNA (h) Lentiviral Particles: sc-61028-V and mGluR-2 shRNA (m) Lentiviral Particles: sc-61029-V.

Molecular Weight of mGluR-2 monomer: 110 kDa.
Molecular Weight of mGluR-2 dimer: 220 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.