

# mGluR-2 (N-15): sc-47135

## 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

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4. Yoshimizu, T., Shimazaki, T., Ito, A. and Chaki, S. 2006. An mGluR-2/-3 antagonist, MGS0039, exerts antidepressant and anxiolytic effects in behavioral models in rats. *Psychopharmacology* 186: 587-593.
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## CHROMOSOMAL LOCATION

Genetic locus: GRM2 (human) mapping to 3p21.2; Grm2 (mouse) mapping to 9 F1.

## STORAGE

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

## SOURCE

mGluR-2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of mGluR-2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-47135 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

mGluR-2 (N-15) is recommended for detection of mGluR-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

mGluR-2 (N-15) is also recommended for detection of mGluR-2 in additional species, including equine, canine and bovine.

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-61029-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: 110/220 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **mGluR-2 (A-7): sc-271655** or **mGluR-2 (A-1): sc-271654**, our highly recommended monoclonal alternatives to mGluR-2 (N-15).