

mGluR-4 (D-15): sc-47141

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-4, which can interact with PRKCABP, acts as a receptor for glutamate. It is highly expressed in cerebellum.

CHROMOSOMAL LOCATION

Genetic locus: GRM4 (human) mapping to 6p21.31; Grm4 (mouse) mapping to 17 A3.3.

SOURCE

mGluR-4 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of mGluR-4 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-47141 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

mGluR-4 (D-15) is recommended for detection of mGluR-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

mGluR-4 (D-15) is also recommended for detection of mGluR-4 in additional species, including canine and porcine.

Suitable for use as control antibody for mGluR-4 siRNA (h): sc-61032, mGluR-4 siRNA (m): sc-61033, mGluR-4 shRNA Plasmid (h): sc-61032-SH, mGluR-4 shRNA Plasmid (m): sc-61033-SH, mGluR-4 shRNA (h) Lentiviral Particles: sc-61032-V and mGluR-4 shRNA (m) Lentiviral Particles: sc-61033-V.

Molecular Weight of mGluR-4 monomer: 110 kDa.

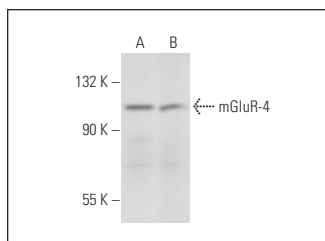
Molecular Weight of mGluR-4 dimer: 190 kDa.

Positive Controls: mouse cerebellum extract: sc-2403 or rat cerebellum extract: sc-2398.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



mGluR-4 (D-15): sc-47141. Western blot analysis of mGluR-4 expression in mouse cerebellum (A) and rat cerebellum (B) tissue extracts.

STORAGE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **mGluR-4 (B-8): sc-376485**, our highly recommended monoclonal alternative to mGluR-4 (D-15).