

mGluR-8a (C-19): sc-30299

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 mGluR1 and mGluR5 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 sub-types of mGluR have an activity mediated by a G protein that inhibits adenylate cyclase activity. GLuR-8 is a group III metabotropic glutamate receptor. In response to glutamate stimulation, GLuR-8 activates GTP-binding proteins that modulate second-messenger cascades. Alternative splicing of this integral membrane protein produces three isoforms: a, b and c. Human GLuR-8 maps to q31.33 of chromosome 7.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GRM8 (human) mapping to 7q31.33; Grm8 (mouse) mapping to 6 A3.

SOURCE

mGluR-8a (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GluR-8 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-30299 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

mGluR-8a (C-19) is recommended for detection of cytoplasmic GluR-8, isoform a 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); non cross-reactive with isoforms B and C.

mGluR-8a (C-19) is also recommended for detection of cytoplasmic GluR-8, isoform a in additional species, including equine, canine and bovine.

Molecular Weight of mGluR-8a: 102 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.

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.