SANTA CRUZ BIOTECHNOLOGY, INC.

mGluR-6 (N-13): sc-47150

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The Power to Question

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-6 is expressed in the synapses of bipolar cell dendrites. This receptor is involved in mediating synaptic transmission from rod and cone photoreceptors to other neurons.

REFERENCES

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5. O'Connor, E., Allen, L.E., Bradshaw, K., Boylan, J., Moore, A.T. and Trump, D. 2006. Congenital stationary night blindness associated with mutations in GRM6 encoding glutamate receptor MGluR-6. Br. J. Ophthalmol. 90: 653-654.

CHROMOSOMAL LOCATION

Genetic locus: GRM6 (human) mapping to 5q35.3; Grm6 (mouse) mapping to 11 B1.3.

SOURCE

mGluR-6 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of mGluR-6 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-47150 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

mGluR-6 (N-13) is recommended for detection of mGluR-6 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-6 (N-13) is also recommended for detection of mGluR-6 in additional species, including canine.

Suitable for use as control antibody for mGluR-6 siRNA (h): sc-61036, mGluR-6 siRNA (m): sc-61037, mGluR-6 shRNA Plasmid (h): sc-61036-SH, mGluR-6 shRNA Plasmid (m): sc-61037-SH, mGluR-6 shRNA (h) Lentiviral Particles: sc-61036-V and mGluR-6 shRNA (m) Lentiviral Particles: sc-61037-V.

Molecular Weight of mGluR-6: 190 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.