**BACKGROUND**

The mGluR (metabotropic glutamate receptor) proteins are members of the G protein-coupled receptor family and are functionally and pharmacologically distinct from the GluR (ionotropic glutamate receptor) proteins. 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-5, which can interact with SIAH1, RYR1, RYR2, ITPR1, Shank1, Shank3 and GRASP, acts as a receptor for glutamate. The PPXXF motif of mGluR-5 binds to HOM1, HOM2 and HOM3.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GRM5 (human) mapping to 11q14.2; Grm5 (mouse) mapping to 7 E1.

**SOURCE**

mGluR-5 (1B3) is a mouse monoclonal antibody raised against amino acids 419-518 representing partial length mGluR-5 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

mGluR-5 (1B3) is recommended for detection of mGluR-5 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)) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for mGluR-5 siRNA (h): sc-61034, mGluR-5 siRNA (m): sc-61035, mGluR-5 shRNA Plasmid (h): sc-61034-SH, mGluR-5 shRNA Plasmid (m): sc-61035-SH, mGluR-5 shRNA (h) Lentiviral Particles: sc-61034-V and mGluR-5 shRNA (m) Lentiviral Particles: sc-61035-V.

Molecular Weight of mGluR-5: 145 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**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 for detailed protocols and support products.