

GABA_C Rp2 (M-18): sc-21343

BACKGROUND

In the central nervous system inhibitory neurotransmission is primarily achieved through activation of receptors for γ -aminobutyric acid (GABA). The GABA receptor type C (GABA_C) is a ligand-gated ion channel with pharmacological properties distinct from the GABA_A receptor. GABA_A and GABA_C receptors form ligand-gated chloride channels. Retinal γ -aminobutyric acid type C (GABA_C) receptors consist of Rho subunits. Mouse Rho2 message does not appear until P9, peaks at P15 and remains at this level through adulthood. Picrotoxin binds to the GABA_C receptor in both channel open and closed states.

REFERENCES

1. Cutting G.R., et al. 1992. Identification of a putative gamma-aminobutyric acid (GABA) receptor subunit Rho2 cDNA and colocalization of the genes encoding Rho2 (GABRR2) and Rho1 (GABRR1) to human chromosome 6q14-q21 and mouse chromosome 4. *Genomics* 12: 801-806
2. Bailey M.E., et al. 1999. Genetic linkage and radiation hybrid mapping of the three human GABA_C receptor Rho subunit genes: GABRR1, GABRR2 and GABRR3. *Biochim. Biophys. Acta* 1447: 307-312.
3. Greka, A., et al. 2000. Expression of GABA_C receptor Rho1 and Rho2 subunits during development of the mouse retina. *Eur. J. Neurosci.* 12: 3575-3582.
4. Enz, R. 2001. GABA_C receptors: a molecular view. *Biol. Chem.* 382: 1111-1122.
5. Ichinose, T., et al. 2002. GABA transporters regulate inhibition in the retina by limiting GABA_C receptor activation. *J. Neurosci.* 22: 3285-3292.

CHROMOSOMAL LOCATION

Genetic locus: GABRR2 (human) mapping to 6q15; Gabrr2 (mouse) mapping to 4 A5.

SOURCE

GABA_C Rp2 (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of GABA_C Rp2 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-21343 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

GABA_C Rp2 (M-18) is recommended for detection of GABA_C Rp2 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 μ g per 100–500 μ g 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).

Suitable for use as control antibody for GABA_C Rp2 siRNA (h): sc-105385, GABA_C Rp2 siRNA (m): sc-145302, GABA_C Rp2 shRNA Plasmid (h): sc-105385-SH, GABA_C Rp2 shRNA Plasmid (m): sc-145302-SH, GABA_C Rp2 shRNA (h) Lentiviral Particles: sc-105385-V and GABA_C Rp2 shRNA (m) Lentiviral Particles: sc-145302-V.

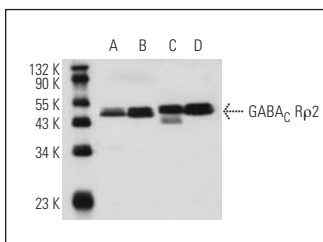
Molecular Weight of GABA_C Rp2: 50 kDa.

Positive Controls: H4 cell lysate: sc-2408, Y79 cell lysate: sc-2240 or mouse brain extract: sc-2253.

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



GABA_C Rp2 (M-18): sc-21343. Western blot analysis of GABA_C Rp2 expression in H4 (A) and Y79 (B) whole cell lysates and mouse brain (C) and rat brain (D) tissue extracts.

SELECT PRODUCT CITATIONS

1. Delgado, L., et al. 2008. Immunohistochemical localization of GABA, GAD-65, and the receptor subunits GABA_{A α 1} and GABA_{B1} in the zebrafish cerebellum. *Cerebellum* 7: 444-450.

RESEARCH USE

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