

GABA_A Rp1 (M-17): sc-21339

BACKGROUND

GAD-65 and GAD-67, glutamate decarboxylases function to catalyze the production of GABA (γ -aminobutyric acid). In the central nervous system GABA functions as the main inhibitory transmitter by increasing a Cl⁻ conductance that inhibits neuronal firing. GABA has been shown to activate both ionotropic (GABA_A) and metabotropic (GABA_B) receptors as well as a third class of receptors called GABA_C. Both GABA_A and GABA_C are ligand-gated ion channels, however, they are structurally and functionally distinct. Members of the GABA_A receptor family include GABA_A R α 1-6, GABA_A R β 1-3, GABA_A R γ 1-3, GABA_A R δ , GABA_A R ϵ , GABA_A Rp1 and GABA_A Rp2. The GABA_B family is composed of GABA_B R1 α and GABA_B R1 β . GABA transporters have also been identified and include GABA T-1, GABA T-2 and GABA T-3 (also designated GAT-1, -2, and -3). The GABA transporters function to terminate GABA action.

REFERENCES

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3. Lukasiewicz, P.D. 1996. GABA_C receptors in the vertebrate retina. *Mol. Neurobiol.* 12: 181-194.
4. Kaupmann, K., et al. 1997. Expression cloning of GABA_B receptors uncovers similarity to metabotropic glutamate receptors. *Nature* 386: 239-246.
5. Wegelius, K., et al. 1998. Distribution of GABA receptor ρ subunit transcripts in the rat brain. *Eur. J. Neurosci.* 10: 350-357.
6. Boue-Grabot, E., et al. 1998. Expression of GABA receptor ρ subunits in rat brain. *J. Neurochem.* 70: 899-907.
7. Bailey, M.E., et al. 1999. Genetic linkage and radiation hybrid mapping of the three human GABA_C receptor ρ subunit genes: GABRR1, GABRR2 and GABRR3. *Biochim. Biophys. Acta* 1447: 307-312.

CHROMOSOMAL LOCATION

Genetic locus: Gabrr1 (mouse) mapping to 4 A5.

SOURCE

GABA_A Rp1 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GABA_A Rp1 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-21339 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GABA_A Rp1 (M-17) is recommended for detection of GABA_A Rp1 of mouse and rat 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).

GABA_A Rp1 (M-17) is also recommended for detection of GABA_A Rp1 in additional species, including equine and canine.

Suitable for use as control antibody for GABA_A Rp1 siRNA (m): sc-42458, GABA_A Rp1 siRNA (m): sc-42458, GABA_A Rp1 shRNA Plasmid (m): sc-42458-SH, GABA_A Rp1 shRNA Plasmid (m): sc-42458-SH, GABA_A Rp1 shRNA (m) Lentiviral Particles: sc-42458-V and GABA_A Rp1 shRNA (m) Lentiviral Particles: sc-42458-V.

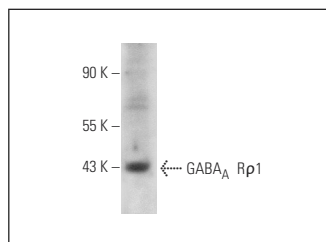
Molecular Weight of GABA_A Rp1: 48 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or RPE-J cell lysate: sc-24771.

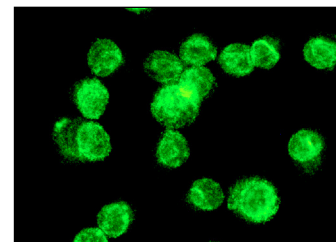
RECOMMENDED SECONDARY REAGENTS

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_A Rp1 (M-17): sc-21339. Western blot analysis of GABA_A Rp1 expression in RPE-J whole cell lysate.



GABA_A Rp1 (M-17): sc-21339. Immunofluorescence staining of methanol-fixed KNRK cells showing membrane localization.

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.