SANTA CRUZ BIOTECHNOLOGY, INC.

$GABA_A$ Rρ2 (P-13): sc-30258

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Gamma-aminobutyric acid (GABA) receptors are pentameric membrane proteins that operate GABA-gated chloride channels and inhibit neurotransmission in the central nervous system. The rho receptor subunits do not exhibit sensitivity to typical GABA receptor modulators such as bicuculline, hexobarbital, and diazepam. While the rho 1 subunit localizes specifically to the retina, rho 2 expresses in all regions of the brain, though levels were still highest in the retina, implying a role for both subunits in visual pathways.

REFERENCES

1. Wang, T.L., et al. 1994. A novel gamma-aminobutyric acid receptor subunit (rho 2) cloned from human retina forms bicuculline-insensitive homooligomeric receptors in *Xenopus* oocytes. J. Neurosci. 14: 6524-6531.
2. Enz, R., et al. 1995. Expression of GABA receptor rho 1 and rho 2 subunits in the retina and brain of the rat. Eur J Neurosci. 7: 1495-1501.
3. Xe, H. 1998. Identification of major phylogenetic branches of inhibitory ligand-gated channel receptors. J. Mol. Evol. 47: 323-333.
4. Enz, R., et al. 1999. $GABA_C$ receptor rho subunits are heterogeneously expressed in the human CNS and form homo- and heterooligomers with distinct physical properties. Eur. J. Neurosci. 11: 41-50.
5. Mehta, A. K., et al. 1999. An update on $GABA_A$ receptors. Brain Res. Brain Res. Rev. 29: 196-217.
6. Rudolph, U., et al. 2001. $GABA_A$ receptor subtypes: dissecting their pharmacological functions. Trends Pharmacol. Sci. 22: 188-194.
7. Didelon, F., et al. 2002. Gamma-Aminobutyric acidA rho receptor subunits in the developing rat hippocampus. J. Neurosci. Res. 67: 739-744.

SOURCE

$GABA_A$ Rρ2 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of $GABA_A$ Rρ2 of mouse 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-30258 P, (100 µg 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.

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.

APPLICATIONS

$GABA_A$ Rρ2 (P-13) is recommended for detection of precursor and mature $GABA_A$ Rρ2 of mouse and rat 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).

Molecular Weight of $GABA_A$ Rρ2: 51 kDa.

Positive Controls: rat brain extract: sc-2392 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) 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.