SANTA CRUZ BIOTECHNOLOGY, INC.

SR-3B (H-71): sc-99079

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Serotonin is a molecule that functions as a neurotransmitter, a hormone and a mitogen, and it modulates several processes including psychiatric disorders, cardiovascular function and motility of the gastrointestinal tract. Serotonin receptors (also designated 5-hydroxytryptamine or 5-HT receptors) are members of the G protein-coupled receptor family that mediate the effects of serotonin. The serotonin receptors (alternatively designated SR) include SR-1, SR-2, SR-3, SR-4, SR-5, SR-6 and SR-7. The SR-1 receptors are subdivided into SR-1A, B, C, D, E and F receptors, while the SR-2 receptors comprise three subtypes: SR-2A, B and C. SR-3 is divided into SR-3A and SR-3B, a 441 amino acid protein with 41% sequence homology to SR-3A. SR-3B is responsible for fast, depolarizing responses in neurons after activation. The SR-3B protein is expressed in kidney and brain, specifically in hippocampus, thalamus and caudate nucleus, and particularly in amygdala. No expression of SR-3B is detected in heart, placenta, lung, liver, skeletal muscle or pancreas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HTR3B (human) mapping to 11q23.2; Htr3b (mouse) mapping to 9 A5.3.

SOURCE

SR-3B (H-71) is a rabbit polyclonal antibody raised against amino acids 22-92 mapping near the N-terminus of SR-3B of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

SR-3B (H-71) is recommended for detection of serotonin 3B receptor of human and, to a lesser extent, mouse and rat 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)], 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 SR-3B siRNA (h): sc-61612, SR-3B siRNA (m): sc-61613, SR-3B shRNA Plasmid (h): sc-61612-SH, SR-3B shRNA Plasmid (m): sc-61613-SH, SR-3B shRNA (h) Lentiviral Particles: sc-61612-V and SR-3B shRNA (m) Lentiviral Particles: sc-61613-V.

Molecular Weight of SR-3B: 50 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.