SANTA CRUZ BIOTECHNOLOGY, INC.

SR-3A (S-19): sc-30560

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Serotonin (also designated 5-hydroxytryptamine or 5-HT) is a molecule that functions as a neurotransmitter, a hormone and a mitogen, and it is predominantly expressed in the gut, platelets and central nervous system (CNS). In the CNS, serotonin modulates several processes, including anxiety, sleep, appetite, behavior and drug abuse. In platelets and gut, serotonin plays a major role in cardiovascular function and motility of the gastrointestinal tract, respectively. Serotonin mediates its effects through several of G protein-coupled receptors, designated 5-HT receptors or alternatively SR receptors. SR-3 is a ligand-gated ion channel, whereas all other known serotonin receptor subtypes are G protein-coupled receptors. SR-4 mediates widespread effects in central and peripheral nervous systems. SR-7 belongs to the superfamily of G protein-coupled receptors. The gene which encodes SR-7 maps to human chromosome 10q21-q24.

REFERENCES

1. Maricq, A.V., et al. 1991. Primary structure and functional expression of the 5HT3 receptor, a serotonin-gated ion channel. Science 254: 432-437.
2. Kenakin, T.P., et al. 1992. Definition of pharmacological receptors. Pharmacol. Rev. 44: 351-362.
3. Ruat, M., et al. 1993. Molecular cloning, characterization, and localization of a high-affinity serotonin receptor (5-HT7) activating cAMP formation. Proc. Natl. Acad. Sci. USA 90: 8547-8551.
4. Gelernter, J., et al. 1995. Assignment of the 5HT7 receptor gene (HTR7) to chromosome 10q and exclusion of genetic linkage with Tourette syndrome. Genomics 26: 207-209.
5. Weiss, B., et al. 1995. Assignment of a human homolog of the mouse Htr3 receptor gene to chromosome 11q23.1-q23.2. Genomics 29: 304-305.

CHROMOSOMAL LOCATION

Genetic locus: HTR3A (human) mapping to 11q23.2; Htr3a (mouse) mapping to 9 A5.3.

SOURCE

SR-3A (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SR-3A of human 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-30560 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.

APPLICATIONS

SR-3A (S-19) is recommended for detection of SR-3A 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)], 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).

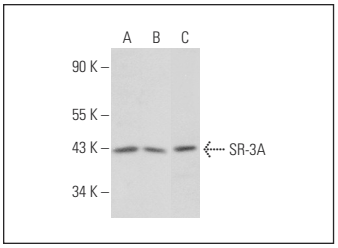
SR-3A (S-19) is also recommended for detection of SR-3A in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for SR-3A siRNA (h): sc-42237, SR-3A siRNA (m): sc-42238, SR-3A shRNA Plasmid (h): sc-42237-SH, SR-3A shRNA Plasmid (m): sc-42238-SH, SR-3A shRNA (h) Lentiviral Particles: sc-42237-V and SR-3A shRNA (m) Lentiviral Particles: sc-42238-V.

Molecular Weight of SR-3A isoforms: 55/58/54/56/59 kDa.

Positive Controls: Sol8 cell lysate: sc-2249, NIH/3T3 whole cell lysate: sc-2210 or RAW 264.7 whole cell lysate: sc-2211.

DATA



SR-3A (S-19): sc-30560. Western blot analysis of SR-3A expression in NIH/3T3 (**A**), RAW 264.7 (**B**) and Sol8 (**C**) whole cell lysates.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **SR-3A (A-9): sc-390168**, our highly recommended monoclonal alternative to SR-3A (S-19).