

SR-6 (R-15): sc-33351

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. Human SR-6 is one of the latest cloned receptors among the known SR receptors. ISR-6 is expressed in the limbic region, which is involved in the control of mood and emotion and in nervous system diseases such as depression and Alzheimer's disease. The cellular mechanisms of SR-6 have not been clearly elucidated.

REFERENCES

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5. Gingrich, J.A., et al. 2001. Dissecting the role of the serotonin system in neuropsychiatric disorders using knockout mice. *Psychopharmacology* 155: 1-10.
6. Yun, H.M., et al. 2006. The novel cellular mechanism of human 5-HT6 receptor through an interaction with Fyn. *J. Biol. Chem.* 282:5496-5505.
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8. Bonsi, P., et al. 2007. Endogenous serotonin excites striatal cholinergic interneurons via the activation of 5-HT 2C, 5-HT6 and 5-HT7 serotonin receptors: Implications for extrapyramidal side effects of serotonin reuptake inhibitors. *Neuropsychopharmacology* 32:1840-1854.

CHROMOSOMAL LOCATION

Genetic locus: HTR6 (human) mapping to 1p36.13; Htr6 (mouse) mapping to 4 D3.

SOURCE

SR-6 (R-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SR-6 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.

Blocking peptide available for competition studies, sc-33351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SR-6 (R-15) is recommended for detection of SR-6 of mouse, rat and human 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).

SR-6 (R-15) is also recommended for detection of SR-6 in additional species, including bovine.

Suitable for use as control antibody for SR-6 siRNA (h): sc-42244, SR-6 siRNA (m): sc-42245, SR-6 shRNA Plasmid (h): sc-42244-SH, SR-6 shRNA Plasmid (m): sc-42245-SH, SR-6 shRNA (h) Lentiviral Particles: sc-42244-V and SR-6 shRNA (m) Lentiviral Particles: sc-42245-V.

Molecular Weight of SR-6: 47 kDa.

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.

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.