

# SSTR3 (H-96): sc-25677

## BACKGROUND

SSTRs (for somatostatin receptors) represent a family of G-protein-coupled receptors which mediate the diverse biological actions of somatostatin (SST). There are five distinct subtypes of SSTRs that bind two natural ligands, SST-14 and SST-28. SSTR2 gives rise to spliced variants, SSTR2A and 2B. SSTRs share common signaling pathways such as the ability to inhibit adenyl cyclase via GTP binding proteins. Some of the subtypes are also coupled to tyrosine phosphatase (SSTR1,2), Ca<sup>2+</sup> channels (SSTR2), Na<sup>+</sup>/H<sup>+</sup> exchanger (SSTR1), PLA-2 (SSTR4), and MAP kinase (SSTR4). Individual target cells typically express more than one SSTR subtype and often all five isoforms. Subtypes of SSTR can form functional homo- and heterodimers.

## REFERENCES

1. Patel, Y.C., et al. 1994. Expression of multiple somatostatin receptor genes in AtT-20 cells. Evidence for a novel somatostatin-28 selective receptor subtype. *J. Biol. Chem.* 269: 1506-1509.
2. Reardon, D.B., et al. 1997. Activation of somatostatin receptor subtypes 2, 3, or 4 stimulates protein tyrosine phosphatase activity in membranes from transfected Ras-transformed NIH 3T3 cells: coexpression with catalytically inactive SHP-2 blocks responsiveness. *Mol. Endocrinol.* 11: 1062-1069.
3. Patel, Y.C. 1999. Somatostatin and its receptor family. *Front Neuroendocrinol.* 20: 157-198.
4. Sharma, K., et al. 1999. C-terminal region of human somatostatin receptor 5 is required for induction of Rb and G1 cell cycle arrest. *Mol. Endocrinol.* 13: 82-90.
5. Kumar, U., et al. 1999. Subtype-selective expression of the five somatostatin receptors (hSSTR1-5) in human pancreatic islet cells: a quantitative double-label immuno-histochemical analysis. *Diabetes* 48: 77-85.

## CHROMOSOMAL LOCATION

Genetic locus: SSTR3 (human) mapping to 22q13.1; Sstr3 (mouse) mapping to 15 E1.

## SOURCE

SSTR3 (H-96) is a rabbit polyclonal antibody raised against amino acids 319-414 of SSTR3 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

SSTR3 (H-96) is recommended for detection of SSTR3 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).

Suitable for use as control antibody for SSTR3 siRNA (h): sc-42273, SSTR3 siRNA (m): sc-42274, SSTR3 shRNA Plasmid (h): sc-42273-SH, SSTR3 shRNA Plasmid (m): sc-42274-SH, SSTR3 shRNA (h) Lentiviral Particles: sc-42273-V and SSTR3 shRNA (m) Lentiviral Particles: sc-42274-V.

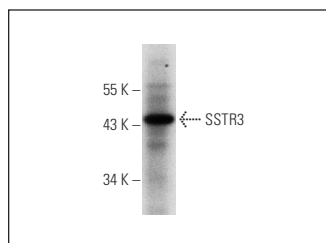
Molecular Weight of SSTR3: 80/45 kDa.

Positive Controls: mouse liver extract: sc-2256.

## 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.

## DATA



SSTR3 (H-96): sc-25677. Western blot analysis of SSTR3 expression in mouse liver tissue extract.

## RESEARCH USE

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

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Try **SSTR3 (7H8E5): sc-293178**, our highly recommended monoclonal alternative to SSTR3 (H-96).