

SSTR1 (H-60): sc-25675

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 adenylyl cyclase via GTP binding proteins. Some of the subtypes are also coupled to tyrosine phosphatase (SSTR1,2), Ca²⁺ channels (SSTR2), Na⁺/H⁺ 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.

CHROMOSOMAL LOCATION

Genetic locus: SSTR1 (human) mapping to 14q21.1; Sstr1 (mouse) mapping to 12 C1.

SOURCE

SSTR1 (H-60) is a rabbit polyclonal antibody raised against amino acids 21-70 of SSTR1 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 or our catalog for detailed protocols and support products.

APPLICATIONS

SSTR1 (H-60) is recommended for detection of SSTR1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SSTR1 (H-60) is also recommended for detection of SSTR1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SSTR1 siRNA (h): sc-42267, SSTR1 siRNA (m): sc-42268, SSTR1 shRNA Plasmid (h): sc-42267-SH, SSTR1 shRNA Plasmid (m): sc-42268-SH, SSTR1 shRNA (h) Lentiviral Particles: sc-42267-V and SSTR1 shRNA (m) Lentiviral Particles: sc-42268-V.

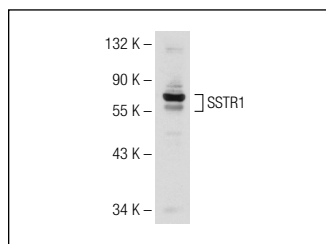
Molecular Weight of SSTR1: 65 kDa.

Positive Controls: JEG-3 whole cell lysate, KNRK whole cell lysate: sc-2214 or MIA PaCa-2 cell lysate: sc-2285.

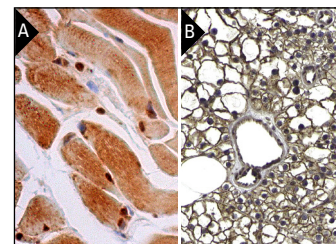
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



SSTR1 (H-60): sc-25675. Western blot analysis of SSTR1 expression in MIA PaCa-2 whole cell lysate.



SSTR1 (H-60): sc-25675. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic and nuclear staining of myocytes (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

- Bell, D., et al. 2008. SRIF receptor subtype expression and involvement in positive and negative contractile effects of somatostatin-14 (SRIF-14) in ventricular cardiomyocytes. *Cell. Physiol. Biochem.* 22: 653-664.
- Yuan, D., et al. 2014. Upregulated expression of SSTR1 is involved in neuronal apoptosis and is coupled to the reduction of bcl-2 following intracerebral hemorrhage in adult rats. *Cell. Mol. Neurobiol.* 34: 951-961.

RESEARCH USE

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



Try **SSTR1 (1F7): sc-293490**, our highly recommended monoclonal alternative to SSTR1 (H-60).