

SSTR2 (H-50): sc-25676

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), 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: SSTR2 (human) mapping to 17q25.1; Sstr2 (mouse) mapping to 11 E2.

SOURCE

SSTR2 (H-50) is a rabbit polyclonal antibody raised against amino acids 320-369 mapping at the C-terminus of SSTR2a 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.

RESEARCH USE

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

APPLICATIONS

SSTR2 (H-50) is recommended for detection of SSTR2a and, to a lesser extent, SSTR2b 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).

SSTR2 (H-50) is also recommended for detection of SSTR2a and, to a lesser extent, SSTR2b in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SSTR2 siRNA (h): sc-44119, SSTR2 siRNA (m): sc-42270, SSTR2 shRNA Plasmid (h): sc-44119-SH, SSTR2 shRNA Plasmid (m): sc-42270-SH, SSTR2 shRNA (h) Lentiviral Particles: sc-44119-V and SSTR2 shRNA (m) Lentiviral Particles: sc-42270-V.

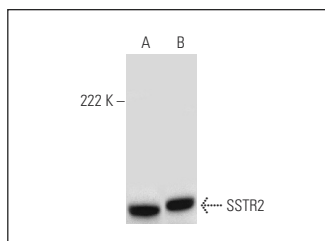
Molecular Weight of SSTR2: 87/148 kDa.

Positive Controls: AtT-20/D16vF2 whole cell lysate: sc-364367, HeLa whole cell lysate: sc-2200 or AT-3 whole cell lysate.

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



SSTR2 (H-50): sc-25676. Western blot analysis of SSTR2 expression in AtT-20/D16vF2 (A) and HeLa (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Volante, M., et al. 2007. Somatostatin receptor type 2A immunohistochemistry in neuroendocrine tumors: a proposal of scoring system correlated with somatostatin receptor scintigraphy. *Mod. Pathol.* 20: 1172-1182.
- 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.
- Casarini, A.P., et al. 2009. Acromegaly: correlation between expression of somatostatin receptor subtypes and response to octreotide-lar treatment. *Pituitary* 12: 297-303.
- Ruscica, M., et al. 2010. Regulation of prostate cancer cell proliferation by somatostatin receptor activation. *Mol. Cell. Endocrinol.* 315: 254-262.
- Yang, N., et al. 2010. Activation of submucosal 5-HT₃ receptors elicits a somatostatin-dependent inhibition of ion secretion in rat colon. *Br. J. Pharmacol.* 159: 1623-1625.
- Zhou, H., et al. 2012. Effect of octreotide on enteric motor neurons in experimental acute necrotizing pancreatitis. *PLoS ONE* 7: e52163.

MONOS
Satisfaction
Guaranteed

Try **SSTR2 (A-8): sc-365502**, our highly recommended monoclonal alternative to SSTR2 (H-50).