SANTA CRUZ BIOTECHNOLOGY, INC.

SSTR2 (A-20): sc-11606

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), Ca^{2+} 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 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain 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.

Blocking peptide available for competition studies, sc-11606 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SSTR2 (A-20) is recommended for detection of SSTR2a and SSTR2b 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).

SSTR2 (A-20) is also recommended for detection of SSTR2a and SSTR2b in additional species, including equine, canine, bovine and porcine.

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: 148 kDa.

Positive Controls: AT-3 whole cell lysate.

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.

SELECT PRODUCT CITATIONS

1. Skanberg, J., et al. 2002. Indium-111-octreotide scintigraphy, intraoperative γ-detector localisation and somatostatin receptor expression in primary human breast cancer. Breast Cancer Res. Treat. 74: 101-111.
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3. Batista, D.L., et al. 2006. The effects of SOM230 on cell proliferation and adrenocorticotropin secretion in human corticotroph pituitary adenomas. J. Clin. Endocrinol. Metab. 91: 4482-4488.
4. Aguado-Llera, D., et al. 2007. Alteration of the somatostatinergic system in the striatum of rats with acute experimental autoimmune encephalomyelitis. Neuroscience 148: 238-249.
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6. Petrovic-Djergovic, D.M., et al. 2007. Somatostatin modulates T cells development in adult rat thymus. Regul. Pept. 142: 101-110.
7. Burgos-Ramos, E., et al. 2008. Minocycline provides protection against β-amyloid(25-35)-induced alterations of the somatostatin signaling pathway in the rat temporal cortex. Neuroscience 154: 1458-1466.
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10. Hernández-Pinto, A.M., et al. 2009. α-Tocopherol decreases the somatostatin receptor-effector system and increases the cyclic AMP/cyclic AMP response element binding protein pathway in the rat dentate gyrus. Neuroscience 162: 106-117.
11. He, Y., et al. 2009. The antiproliferative effects of somatostatin receptor subtype 2 in breast cancer cells. Acta Pharmacol. Sin. 30: 1053-1059.
12. Aguado-Llera, D., et al. 2010. Role of ethanolamine phosphate in the hippocampus of rats with acute experimental autoimmune encephalomyelitis. Neurochem. Int. 58: 22-34.
13. Li, Y., et al. 2011. Colonic submucosal 5-HT3 receptor-mediated somatostatin-dependent secretoinhibitory pathway is suppressed in water-immersion restraint stressed rats. Eur. J. Pharmacol. 656: 94-100.