

SSTR1 (C-17): sc-11604

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

SOURCE

SSTR1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain 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.

Blocking peptide available for competition studies, sc-11604 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SSTR1 (C-17) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SSTR1 (C-17) is also recommended for detection of SSTR1 in additional species, including equine, canine, bovine, porcine and avian.

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: sc-364255, MIA PaCa-2 cell lysate: sc-2285 or KNRK whole cell lysate: sc-2214.

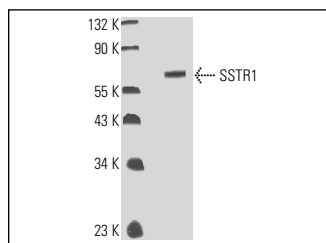
STORAGE

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.

DATA



SSTR1 (C-17): sc-11604. Western blot analysis of SSTR1 expression in MIA PaCa-2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Aguado-Llera, D., et al. 2005. Protective effects of insulin-like growth factor-I on the somatostatinergic system in the temporal cortex of β -amyloid-treated rats. *J. Neurochem.* 92: 607-615.
2. Aguado-Llera, D., et al. 2007. 17 β -estradiol protects depletion of rat temporal cortex somatostatinergic system by β -amyloid. *Neurobiol. Aging* 28: 1396-1409.
3. Burgos-Ramos, E., et al. 2007. Chronic but not acute intracerebroventricular administration of amyloid β -peptide (25-35) decreases somatostatin content, adenylyl cyclase activity, somatostatin-induced inhibition of adenylyl cyclase activity, and adenylyl cyclase I levels in the rat hippocampus. *J. Neurosci. Res.* 85: 433-442.
4. 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.
5. Burgos-Ramos, E., et al. 2009. Sulfadiazine partially protects the rat temporal cortex from amyloid β peptide (25-35)-induced alterations of the somatostatinergic system. *Neuroendocrinology* 89: 400-410.
6. Ruscica, M., et al. 2009. Regulation of prostate cancer cell proliferation by somatostatin receptor activation. *Mol. Cell. Endocrinol.* 315: 254-262.
7. Saowakon, N., et al. 2009. Fasciola gigantica: anthelmintic effect of the aqueous extract of *Artocarpus lakoocha*. *Exp. Parasitol.* 122: 289-298.
8. 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.
9. Ruscica, M., et al. 2010. Regulation of prostate cancer cell proliferation by somatostatin receptor activation. *Mol. Cell. Endocrinol.* 315: 254-262.

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