

# Somatostatin (H-106): sc-13099

## BACKGROUND

Somatostatin is a regulatory hormone that is expressed throughout the body and inhibits the release of numerous secondary hormones by binding to high-affinity G protein-coupled somatostatin receptors. This cyclic tetradecapeptide inhibits the secretion of many important hormones, including somatotropin (also designated growth hormone, or GH), Insulin and glucagon. Somatostatin is found in both the hypothalamus and pancreas. Somatostatin is thought to be involved in the regulation of Insulin synthesis. The hormone somatostatin has active 14 amino acid and 28 amino acid forms that are produced by alternate cleavage of the single preproprotein encoded by this gene. In the cerebellum, Somatostatin-14 and Somatostatin-28 are highly expressed at birth and in the adult stage, respectively. Somatostatin affects rates of neurotransmission in the central nervous system and proliferation of both normal and tumorigenic cells. The gene encoding Somatostatin maps to human chromosome 3q27.3.

## CHROMOSOMAL LOCATION

Genetic locus: SST (human) mapping to 3q27.3; Sst (mouse) mapping to 16 B1.

## SOURCE

Somatostatin (H-106) is a rabbit polyclonal antibody raised against amino acids 1-106 of Somatostatin 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.

## APPLICATIONS

Somatostatin (H-106) is recommended for detection of Somatostatin 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).

Somatostatin (H-106) is also recommended for detection of Somatostatin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Somatostatin siRNA (h): sc-39728, Somatostatin siRNA (m): sc-39729, Somatostatin shRNA Plasmid (h): sc-39728-SH, Somatostatin shRNA Plasmid (m): sc-39729-SH, Somatostatin shRNA (h) Lentiviral Particles: sc-39728-V and Somatostatin shRNA (m) Lentiviral Particles: sc-39729-V.

Molecular Weight of Somatostatin: 17 kDa.

Positive Controls: H4 cell lysate: sc-2408.

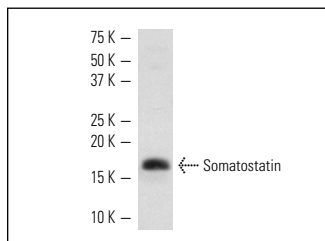
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

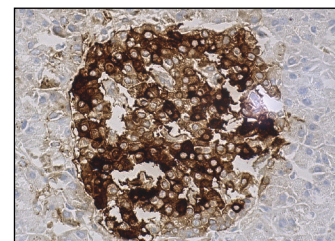
## RESEARCH USE

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

## DATA



Somatostatin (H-106): sc-13099. Western blot analysis of Somatostatin expression in H4 whole cell lysate.



Somatostatin (H-106): sc-13099. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic and membrane staining of Islets of Langerhans.

## SELECT PRODUCT CITATIONS

- Nakamura, M., et al. 2004. Signaling complex formation of phospholipase C $\beta$ 4 with metabotropic glutamate receptor type 1 $\alpha$  and 1,4,5-trisphosphate receptor at the perisynapse and endoplasmic reticulum in the mouse brain. *Eur. J. Neurosci.* 20: 2929-2944.
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- Cho, J.H., et al. 2010. Characteristics and functions of  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionate receptors expressed in mouse pancreatic  $\alpha$ -cells. *Endocrinology* 151: 1541-1550.
- Zhou, L., et al. 2010. Inhibition of angiogenic activity of hypoxic fibroblast cell line MRC-5 *in vitro* by topotecan. *Med. Oncol.* E-published.
- Wei, B., et al. 2011. Emx1-expressing neural stem cells in the subventricular zone give rise to new interneurons in the ischemic injured striatum. *Eur. J. Neurosci.* 33: 819-830.
- Yang, Y., et al. 2011. Increased interstitial white matter neuron density in the dorsolateral prefrontal cortex of people with schizophrenia. *Biol. Psychiatry* 69: 63-70.
- Ma, T., et al. 2012. A subpopulation of dorsal lateral/caudal ganglionic eminence-derived neocortical interneurons expresses the transcription factor Sp8. *Cereb. Cortex* 22: 2120-2130.

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Try **Somatostatin (G-10): sc-55565** or **Somatostatin (H-11): sc-74556**, our highly recommended monoclonal alternatives to Somatostatin (H-106). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Somatostatin (G-10): sc-55565**.