

Somatostatin (D-20): sc-7819

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 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Somatostatin of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7819 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Somatostatin (D-20) is recommended for detection of Somatostatin 28 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).

Somatostatin (D-20) is also recommended for detection of Somatostatin 28 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.

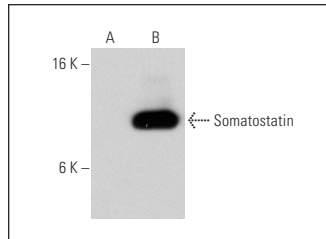
STORAGE

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

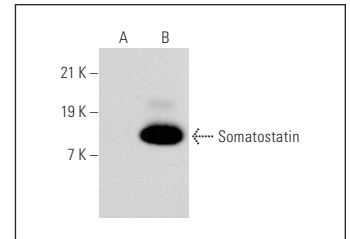
RESEARCH USE

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

DATA



Somatostatin (D-20): sc-7819. Western blot analysis of Somatostatin expression in non-transfected: sc-110760 (A) and human Somatostatin transfected: sc-110762 (B) 293 whole cell lysates.



Somatostatin (H-106): sc-13099. Western blot analysis of Somatostatin expression in non-transfected: sc-110760 (A) and human Somatostatin transfected: sc-110762 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Hsu, Y.H., et al. 2003. Contrasting expression of Kv4.3, an A-type K⁺ channel, in migrating Purkinje cells and other post-migratory cerebellar neurons. *Eur. J. Neurosci.* 18: 601-612.
- Saiz-Sanchez, D., et al. 2009. Somatostatin, τ , and β -amyloid within the anterior olfactory nucleus in Alzheimer disease. *Exp Neurol.* 223: 347-350.
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- Karaoz, E., et al. 2010. Isolation and characterization of stem cells from pancreatic islet: pluripotency, differentiation potential and ultrastructural characteristics. *Cytotherapy* 12: 288-302.
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- Saiz-Sanchez, D., et al. 2012. Differential expression of interneuron populations and correlation with amyloid- β deposition in the olfactory cortex of an A β PP/PS1 transgenic mouse model of Alzheimer's disease. *J. Alzheimers Dis.* 31: 113-129.


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Try **Somatostatin (G-10): sc-55565** or **Somatostatin (H-11): sc-74556**, our highly recommended monoclonal alternatives to Somatostatin (D-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Somatostatin (G-10): sc-55565**.