**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 prepropeptide 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 3q28.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SST (human) mapping to 3q28.

**PRODUCT**

Somatostatin (h): 293 Lysate represents a lysate of human Somatostatin transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

**APPLICATIONS**

Somatostatin (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Somatostatin antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Somatostatin (D-20): sc-7819 is recommended as a positive control antibody for Western Blot analysis of enhanced human Somatostatin expression in Somatostatin transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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.

**DATA**

![Diagrams of Somatostatin expression](image)

**STORAGE**

Store at -20°C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.