



Product Information

Product ID S5747

CAS No. 59481-27-5

Chemical Name

Synonym

Formula $C_{76}H_{104}N_{18}O_{20}S_2$

Formula Wt. 1653.91

Melting Point

Purity $\geq 95\%$

Solubility

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description

Somatostatin is an endogenous neuropeptide hormone found in the brain and pancreas. Somatostatin binds several isoforms of the somatostatin receptor, exhibiting anxiolytic, antiepileptic/anticonvulsant, and anorexigenic activities. In vivo, somatostatin improves performance in the light/dark avoidance test. Somatostatin also suppresses seizures and prevents the generation of seizures, potentially through modulation of GABA signaling. Somatostatin induces cell death under hypoxic/ischemic conditions. In tumor cells, somatostatin displays pro-apoptotic properties, potentially involving the inhibition of PI3K/Akt signaling. Somatostatin also limits food intake and inhibits secretion of insulin and glucagon through alteration of G β signaling and P/Q-type N-type, and L-type voltage-gated Ca $^{2+}$ channel signaling.

H-Ala-Gly-Cys-Lys-Asn-Phe-
Phe-Trp-Lys-Thr-Tyr-Thr-Ser-
Cys-OH
(Cys3-Cys14)

Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S5747	1 mg	\$113.20
S5747	2 mg	\$192.20
S5747	5 mg	\$340.20

References

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Begg DP, Woods SC. Interactions between the central nervous system and pancreatic islet secretions: a historical perspective. *Adv Physiol Educ*. 2013 Mar;37(1):53-60. PMID: 23471249.

Schwetz TA, Ustione A, Piston DW. Neuropeptide Y and somatostatin inhibit insulin secretion through different mechanisms. *Am J Physiol Endocrinol Metab*. 2013 Jan 15;304(2):E211-21. PMID: 23211512.

Kailey B, van de Bunt M, Cheley S, et al. SSTR2 is the functionally dominant somatostatin receptor in human pancreatic β - and α -cells. *Am J Physiol Endocrinol Metab*. 2012 Nov 1;303(9):E1107-16. PMID: 22932785.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.