



LKT Laboratories, Inc.

Somatostatin-14

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Product Information

Product ID S5749

CAS No. 38916-34-6

Chemical Name

Synonym Somatostatin, Growth hormone release-inhibiting factor, Somatotropin release-inhibiting hormone

Formula C₇₆H₁₀₄N₁₈O₁₉S₂

Formula Wt. 1637.92

Melting Point

Purity ≥95%

Solubility Soluble in 5% acetic acid.

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

Bulk quantities available upon request

Product ID	Size
S5749	5 mg
S5749	10 mg
S5749	25 mg

Store Temp -20° 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 Gβγ signaling and P/Q-type, N-type, and L-type voltage-gated Ca²⁺ channel signaling.

References Stumm R. Somatostatin receptor sst2 reduces Akt activity and aggravates hypoxic/ischemic death in cerebral cortical neurons. *Neuropharmacology*. 2014 Feb;77:249-56. PMID: 24157493.

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