

PRODUCT INFORMATION



Secretin (human) (trifluoroacetate salt)

Item No. 24990

MF:	$C_{130}H_{220}N_{44}O_{40} \cdot XCF_3COOH$	H—His—Ser—Asp—Gly—Thr—Phe—Thr—Ser—Glu—Leu—
FW:	3,039.4	Ser—Arg—Leu—Arg—Glu—Gly—Ala—Arg—Leu—Gln—
Purity:	≥95%	Arg—Leu—Leu—Gln—Gly—Leu—Val—NH ₂
Supplied as:	A lyophilized powder	
Storage:	-20°C	• XCF ₃ COOH
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Secretin (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the secretin (human) (trifluoroacetate salt) in water. The solubility of secretin (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Secretin is an endogenous 27-amino acid gastrointestinal hormone and neuropeptide that regulates secretion from the stomach, pancreas, and liver.^{1,2} It belongs to the secretin/glucagon superfamily of peptides, which includes glucagon (Item No. 24204), glucagon-like peptide-1 (GLP-1; Item No. 24460), GLP-2 (Item No. 24414), and pituitary adenylate cyclase-activating polypeptide (PACAP; Item Nos. 24769 | 24770).³ Secretin dose-dependently increases somatostatin release from primary human antral cells *in vitro*.⁴ *In vivo*, secretin dose-dependently increases the volume of pancreatic secretion as well as inhibits gastric acid secretion induced by gastrin I (Item No. 24457) in rats when administered at a dose of 100 pmol/kg per h.⁵ Secretin (40 µg/kg, i.v.) increases the number of neurons expressing c-fos in the central amygdala and area postrema in rats.⁶

References

1. Kopin, A.S., Wheeler, M.B., and Leiter, A.B. Secretin: Structure of the precursor and tissue distribution of the mRNA. *Proc. Natl. Acad. Sci. U.S.A.* **87**(6), 2299-2303 (1990).
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3. Vaudry, D., Falluel-Morel, A., Bourgault, S., *et al.* Pituitary adenylate cyclase-activating polypeptide and its receptors: 20 years after the discovery. *Pharmacol. Rev.* **61**(3), 283-357 (2009).
4. Buchan, A.M., Meloche, R.M., Kwok, Y.N., *et al.* Effect of cholecystokinin and secretin on somatostatin release from cultured antral cells. *Gastroenterology* **104**(5), 1414-1419 (1993).
5. Solomon, T.E., Keire, D.A., Gong, P., *et al.* Receptor subtypes: Species variations in secretin affect potency for pancreatic but not gastric secretion. *Pancreas* **26**(3), 300-305 (2003).
6. Goulet, M., Shiromani, P.J., Ware, C.M., *et al.* A secretin i.v. infusion activates gene expression in the central amygdala of rats. *Neuroscience* **118**(4), 881-888 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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