

# PRODUCT INFORMATION



## Secretin (rat) (trifluoroacetate salt)

Item No. 24561

**MF:**  $C_{129}H_{216}N_{42}O_{42} \cdot XCF_3COOH$  H—His—Ser—Asp—Gly—Thr—Phe—Thr—Ser—Glu—Leu—  
**FW:** 3,027.4 Ser—Arg—Leu—Gln—Asp—Ser—Ala—Arg—Leu—Gln—  
**Purity:**  $\geq 95\%$  Arg—Leu—Leu—Gln—Gly—Leu—Val—NH<sub>2</sub>  
**Supplied as:** A lyophilized powder • XCF<sub>3</sub>COOH  
**Storage:** -20°C  
**Stability:**  $\geq 4$  years

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

### Laboratory Procedures

Secretin (rat) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the secretin (rat) (trifluoroacetate salt) in water. The solubility of secretin (rat) (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 a neuropeptide hormone that regulates secretion from the stomach, pancreas, and liver.<sup>1,2</sup> It binds to the rat secretin receptor (SCT-R;  $K_i = 3.3$  nM) and increases intracellular cAMP ( $EC_{50} = 1$  nM) in COS cells expressing rat SCT-R.<sup>3</sup> It also increases SCT-R phosphorylation 7.2-fold at a concentration of 0.1  $\mu$ M. Secretin dose-dependently increases the volume of pancreatic secretion and inhibits gastric acid secretion induced by gastrin I (Item No. 24457) in rats when administered at a dose of 100 pmol/kg per hour.<sup>4</sup>

### 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).
2. Sekar, R. and Chow, B.K. Metabolic effects of secretin. *Gen. Comp. Endocrinol.* **181**, 18-24 (2013).
3. Ozcelebi, F., Holtmann, M.H., Rentsch, R.U., et al. Agonist-stimulated phosphorylation of the carboxyl-terminal tail of the secretin receptor. *Mol. Pharmacol.* **48(5)**, 818-824 (1995).
4. 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).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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