

# PRODUCT INFORMATION



## Eledoisin

Item No. 28810

**CAS Registry No.:** 69-25-0  
**Formal Name:** 5-oxo-L-prolyl-L-prolyl-L-seryl-L-lysyl-L- $\alpha$ -aspartyl-L-alanyl-L-phenylalanyl-L-isoleucylglycyl-L-leucyl-L-methioninamide

**Synonyms:** ELD 950, Moschatin

**MF:** C<sub>54</sub>H<sub>85</sub>N<sub>13</sub>O<sub>15</sub>S

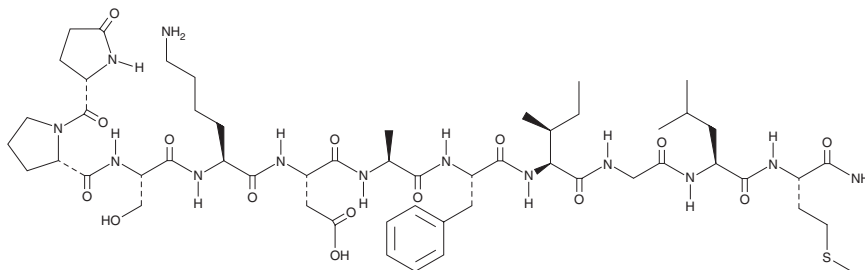
**FW:** 1,188.4

**Purity:**  $\geq$ 98%

**Supplied as:** A crystalline solid

**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

Eledoisin is supplied as a crystalline solid. A stock solution may be made by dissolving the eledoisin in the solvent of choice, which should be purged with an inert gas. Eledoisin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of eledoisin in these solvents is approximately 20 and 15 mg/ml, respectively.

Eledoisin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, eledoisin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Eledoisin has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Eledoisin is an undecapeptide tachykinin neuropeptide and neurokinin (NK) receptor agonist originally isolated from *E. moschata*.<sup>1,2</sup> It binds to NK<sub>1</sub> (pD<sub>2</sub> = 9.5 and 9.21 in isolated dog carotid artery and guinea pig ileum, respectively), NK<sub>2</sub> (pD<sub>2</sub> = 8.22 and 7.7 in isolated rabbit pulmonary artery and rat duodenum, respectively), and NK<sub>3</sub> receptors (pD<sub>2</sub> = 7.11 and 7.06 in isolated rat portal vein and hamster urinary bladder, respectively).<sup>3</sup> Eledoisin induces contraction of isolated guinea pig ileum and rabbit jejunum.<sup>4</sup> It also induces salivation in rats and lowers arterial blood pressure in rabbits and guinea pigs *in vivo*.<sup>4,5</sup>

### References

1. Severini, C., Improta, G., Falconieri-Erspermer, G., *et al.* The tachykinin peptide family. *Pharmacol. Rev.* **54**(2), 285-322 (2002).
2. Erspermer, V. and Anastasi, A. Structure and pharmacological actions of eledoisin, the active endecapeptide of the posterior salivary glands of Eledone. *Experientia* **18**(2), 58-59 (1962).
3. Regoli, D., Drapeau, G., Dion, S., *et al.* Receptors for substance P and related neurokinins. *Pharmacology* **38**(1), 1-15 (1989).
4. Holzer-Petsche, U., Schimek, E., Amann, R., *et al.* *In vivo* and *in vitro* actions of mammalian tachykinins. *Naunyn Schmiedebergs Arch. Pharmacol.* **330**(2), 130-135 (1985).
5. Hancock, J.C. and Hoover, D.B. Effect of substance P and other tachykinins on arterial pressure in guinea-pigs. *J. Auton. Pharmacol.* **5**(1), 25-30 (1985).

#### 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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