

# PRODUCT INFORMATION



## Caerulein (acetate)

Item No. 24408

CAS Registry No.: 2760881-68-1

Formal Name: 5-oxo-L-prolyl-L-glutamyl-L- $\alpha$ -aspartyl-O-sulfo-L-tyrosyl-L-threonylglycyl-L-tryptophyl-L-methionyl-L- $\alpha$ -aspartyl-L-phenylalaninamide, monoacetate

Synonym: Ceruletide

MF:  $C_{58}H_{73}N_{13}O_{21}S_2 \cdot C_2H_4O_2$

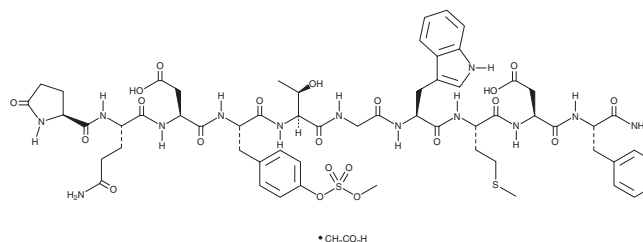
FW: 1,412.5

Purity:  $\geq 95\%$

Supplied as: A lyophilized powder

Storage:  $-20^\circ\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

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

### Description

Caerulein is an oligopeptide originally isolated from skin extracts of *H. caerulea*/L. *caerulea*.<sup>1</sup> *In vivo*, caerulein increases the flow rate of gastric juices as well as pepsin and acid outputs in the gut of dogs, rats, and frogs.<sup>2</sup> Caerulein (25-500 ng/kg) stimulates insulin secretion in a dose-dependent manner in anesthetized dogs.<sup>3</sup> It is also used to induce pancreatitis in various animal models, as it increases autophagic vacuole formation and lysosomal enzyme activity leading to acinar cell necrosis when administered at a dose of 5 or 10  $\mu\text{g/kg}$  per hour.<sup>4</sup>

### References

1. De Caro, G., Endean, R., Erspamer, V., *et al.* Occurrence of caerulein in extracts of the skin of *Hyla Caerulea* and other Australian hylids. *Br. J. Pharmac. Chemother.* **33(1)**, 48-58 (1968).
2. Bertaccini, G., Endean, R., Erspamer, V., *et al.* The actions of caerulein on gastric secretion of the dog and the rat. *Br. J. Pharmacol.* **34(2)**, 311-329 (1968).
3. Bertaccini, G., De Caro, G., and Melchiorri, P. The effects of caerulein on insulin secretion in anaesthetized dogs. *Br. J. Pharmacol.* **40(1)**, 78-85 (1970).
4. Willemer, S., Elsasser, H.P., and Adler, G. Hormone-induced pancreatitis. *Eur. Surg. Res.* **24(Suppl 1)**, 29-39 (1992).

#### 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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