

PRODUCT INFORMATION

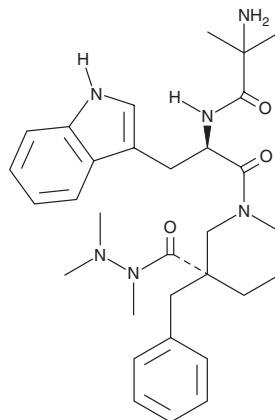


Anamorelin

Item No. 24676

CAS Registry No.: 249921-19-5
Formal Name: (3R)-1-[(2R)-2-[(2-amino-2-methyl-1-oxopropyl)amino]-3-(1H-indol-3-yl)-1-oxopropyl]-3-(phenylmethyl)-1,2,2-trimethylhydrazide, 3-piperidinecarboxylic acid

Synonym: RC-1291
MF: C₃₁H₄₂N₆O₃
FW: 546.7
Purity: ≥98%
UV/Vis.: λ_{max}: 219 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Anamorelin is supplied as a crystalline solid. A stock solution may be made by dissolving the anamorelin in the solvent of choice. Anamorelin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of anamorelin in these solvents is approximately 33, 20, and 25 mg/ml, respectively.

Anamorelin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, anamorelin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Anamorelin has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Anamorelin is a small molecule agonist of the growth hormone (GH) secretagogue receptor 1a (GHS-R1a) and a mimetic of ghrelin (Item Nos. 15072 | 24458; K_i = 0.7 nM).^{1,2} It induces calcium mobilization in CHO cells expressing rat GHS-R1a in a concentration-dependent manner and GH release from rat pituitary cells (EC₅₀ = 1.5 nM). *In vivo*, anamorelin stimulates GH release in sham and vagotomized rats in a dose-dependent manner.¹ Anamorelin (3-30 mg/kg) also increases food intake in rats.² Formulations containing anamorelin have been used to treat cancer anorexia and cachexia in patients with non-small cell lung cancer.

References

1. Morozumi, N., Hanada, T., Habara, H., *et al.* The role of C-terminal part of ghrelin in pharmacokinetic profile and biological activity in rats. *Peptides* **32**(5), 1001-1007 (2011).
2. Zhang, H. and Garcia, J.M. Anamorelin hydrochloride for the treatment of cancer-anorexia-cachexia in NSCLC. *Expert Opin. Pharmacother.* **16**(8), 1245-1253 (2015).

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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