

PRODUCT INFORMATION



Capromorelin (tartrate)

Item No. 33488

CAS Registry No.: 193273-69-7
Formal Name: 2-amino-N-[(1R)-2-[(3aR)-2,3,3a,4,6,7-hexahydro-2-methyl-3-oxo-3a-(phenylmethyl)-5H-pyrazolo[4,3-c]pyridin-5-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-propanamide, (2R,3R)-2,3-dihydroxybutanedioate

Synonyms: CP 424,391-18, RQ-00000005

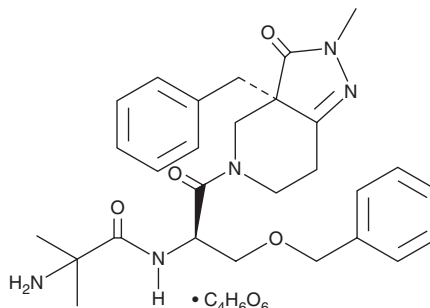
MF: C₂₈H₃₅N₅O₄ • C₄H₆O₆
FW: 655.7

Purity: ≥98%

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

Capromorelin (tartrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the capromorelin (tartrate) in the solvent of choice, which should be purged with an inert gas. Capromorelin (tartrate) is soluble in organic solvents such as ethanol and DMSO.

Description

Capromorelin is a growth hormone (GH) secretagogue and an agonist of GH secretagogue receptor 1a (GHS-R1a), which is also known as the ghrelin receptor.^{1,2} It stimulates GH release from primary rat pituitary cells with an EC₅₀ value of 3 nM.¹ Capromorelin (0.3, 3, and 30 nM) stimulates intracellular calcium mobilization in primary rat pituitary cells. It increases rat serum GH levels (ED₅₀ = 0.04 mg/kg, i.v.) and decreases dog serum insulin-like growth factor 1 (IGF-1) levels when administered orally at a dose of 1 mg/kg. Capromorelin (3.9 mg/kg, once per day for 28 days) increases rat body weight by 43.6% without affecting whole-body percentages of fat, lean mass, or bone content. It decreases infarct size in a rabbit model of ischemia-reperfusion injury induced by left coronary artery occlusion when administered at a dose of 25 mg/kg.³ Formulations containing capromorelin have been used in the treatment of weight loss in cats with chronic kidney disease and as an appetite stimulant in dogs.

References

1. Pan, L.C., Carpino, P.A., Lefker, B.A., *et al.* Preclinical pharmacology of CP-424,391, an orally active pyrazolinone-piperidine growth hormone secretagogue. *Endocrine* **14**(1), 121-132 (2001).
2. Rhodes, L., Zollers, B., Wofford, J.A., *et al.* Capromorelin: A ghrelin receptor agonist and novel therapy for stimulation of appetite in dogs. *Vet. Med. Sci.* **4**(1), 3-16 (2017).
3. MacAndrew, J.T., Ellery, S.S., Parry, M.A., *et al.* Efficacy of a growth hormone-releasing peptide mimetic in cardiac ischemia/reperfusion injury. *Eur. J. Pharmacol.* **423**(2-3), 195-202 (2001).

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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