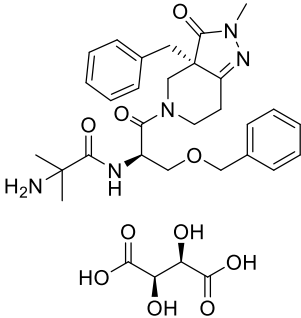


Product data sheet



MedKoo Cat#: 326824 Name: Capromorelin tartrate CAS#: 193273-69-7 (tartrate) Chemical Formula: C ₃₂ H ₄₁ N ₅ O ₁₀ Exact Mass: 655.2853 Molecular Weight: 655.705	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Capromorelin, also known as CP-424,391, is a growth hormone secretagogue and ghrelin mimetic (hGHS-R1a K(i)=7 nM, rat pituitary EC(50)=3 nM). Initial studies have shown the drug to directly raise insulin growth factor 1 (IGF-1) and growth hormone levels. Capromorelin showed enhanced intestinal absorption in rodent models and exhibited superior pharmacokinetic properties, including high bioavailabilities in two animal species [F(rat)=65%, F(dog)=44%]. This short-duration GHS was orally active in canine models and was selected as a development candidate for the treatment of musculoskeletal frailty in elderly adults.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	100	152.51
Ethanol	100	152.51

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.53 mL	7.63 mL	15.25 mL
5 mM	0.31 mL	1.53 mL	3.05 mL
10 mM	0.15 mL	0.76 mL	1.53 mL
50 mM	0.03 mL	0.15 mL	0.31 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

1. Carpino PA, Lefker BA, Toler SM, Pan LC, Hadcock JR, Cook ER, DiBrino JN, Campeta AM, DeNinno SL, Chidsey-Frink KL, Hada WA, Inthavongsay J, Mangano FM, Mullins MA, Nickerson DF, Ng O, Pirie CM, Ragan JA, Rose CR, Tess DA, Wright AS, Yu L, Zawistoski MP, DaSilva-Jardine PA, Wilson TC, Thompson DD. Pyrazolinone-piperidine dipeptide growth hormone secretagogues (GHSs). Discovery of capromorelin. *Bioorg Med Chem.* 2003 Feb 20;11(4):581-90. doi: 10.1016/s0968-0896(02)00433-9. PMID: 12538023.

2. Zollers B, Rhodes L, Heinen E. Capromorelin oral solution (ENTYCE®) increases food consumption and body weight when administered for 4 consecutive days to healthy adult Beagle dogs in a randomized, masked, placebo controlled study. *BMC Vet Res.* 2017 Jan 5;13(1):10. doi: 10.1186/s12917-016-0925-z. PMID: 28056951; PMCID: PMC5217407.

Product data sheet



7. Bioactivity

Biological target:

TBD

In vitro activity

TBD

In vivo activity

The in vivo GH activities of the PP dipeptide analogues were measured in an anesthetized rat model following iv administration. Capromorelin and compounds 5b and 5c stimulated GH secretion after a single 1 mg/kg dose, though the mean GH peak heights for capromorelin and 5c were significantly higher than the mean GH peak height for 5b (data not shown). Capromorelin and 5c showed similar dose–response relationships in the model, with ED50 values less than 0.05 mg/kg iv. The weaker in vivo activity of the N-ethyl PP derivative 5b was attributed to its increased lipophilicity, which could have reduced the amount of unbound drug in the plasma compartment capable of interacting with the GHS-R1a.

Reference: Bioorg Med Chem. 2003 Feb 20;11(4):581-90. <https://linkinghub.elsevier.com/retrieve/pii/S0968089602004339>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.