

PRODUCT INFORMATION



Nonapeptide-1 (acetate)

Item No. 27757

Formal Name: L-methionyl-L-prolyl-D-phenylalanyl-L-arginyl-D-tryptophyl-L-phenylalanyl-L-lysyl-L-prolyl-L-valinamide, acetate

Synonyms: Met-Pro-D-Phe-Arg-D-Trp-Phe-Lys-Pro-Val-NH₂, MPFRWFKPV-NH₂, 153N-6

MF: C₆₁H₈₇N₁₅O₉S • XC₂H₄O₂

FW: 1,206.5

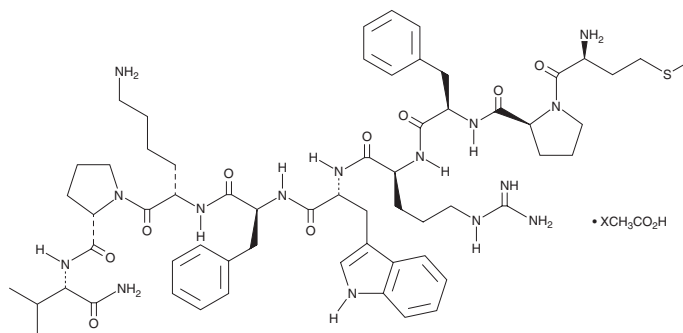
Purity: ≥95%

UV/Vis.: λ_{max}: 281 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

Nonapeptide-1 (acetate) is supplied as a crystalline solid. Aqueous solutions of nonapeptide-1 (acetate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of nonapeptide-1 (acetate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Nonapeptide-1 is an antagonist of melanocortin receptor 1 (MC1R; K_i = 40 nM in COS-1 cells expressing human receptors).¹ It is selective for MC1R over MC3R, MC4R, and MC5R (K_is = 470, 1,340, and 2,400 nM, respectively). Nonapeptide-1 inhibits cAMP accumulation and melanosome dispersion induced by α-melanocyte-stimulating hormone (α-MSH) in melanocytes with IC₅₀ values of 2.5 and 11 nM, respectively.²

References

1. Schiöth, H.B., Muceniece, R., and Wikberg, J.E.S. Characterization of the binding of MSH-B, HB-228, GHRP-6 and 153N-6 to the human melanocortin receptor subtypes. *Neuropeptides* **31(6)**, 565-571 (1997).
2. Jayawickreme, C.K., Quillan, J.M., Graminski, G.F., *et al.* Discovery and structure-function analysis of α-melanocyte-stimulating hormone antagonists. *J. Biol. Chem.* **269(47)**, 29846-29854 (1994).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM