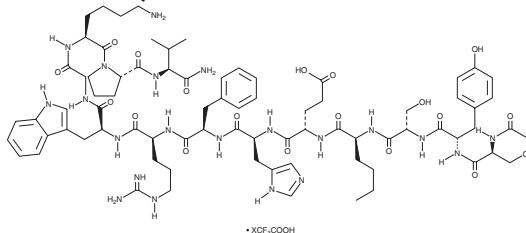


PRODUCT INFORMATION

[Nle⁴,D-Phe⁷]-α-MSH (trifluoroacetate salt)

Item No. 24475

MF: C₇₈H₁₁₁N₂₁O₁₉ • XCF₃COOH
FW: 1,646.9
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

[Nle⁴,D-Phe⁷]-α-Melanocyte-stimulating hormone ([Nle⁴,D-Phe⁷]-α-MSH) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the [Nle⁴,D-Phe⁷]-α-MSH (trifluoroacetate salt) in water. The solubility of [Nle⁴,D-Phe⁷]-α-MSH (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

[Nle⁴,D-Phe⁷]-α-MSH is a peptide agonist of melanocortin receptor I (MC1R).¹ It induces cAMP accumulation in mouse L-cells expressing human MC1R (EC₅₀ = 0.5 nM). It also induces tyrosinase activity in mouse melanoma cells.² *In vivo*, [Nle⁴,D-Phe⁷]-α-MSH (1.8 mg/kg) induces long-term skin darkening in frogs (*R. pipiens*).³ Formulations containing [Nle⁴,D-Phe⁷]-α-MSH have been used in the treatment of erythropoietic protoporphyria and as tanning agents.

References

1. Haskell-Luevano, C., Miwa, H., Dickinson, C., *et al.* Binding and cAMP studies of melanotropin peptides with the cloned human peripheral melanocortin receptor, hMC1R. *Biochem. Biophys. Res. Commun.* **204**(30), 1137-1147 (1994).
2. Sawyer, T.K., Sanfilippo, P.J., Hruby, V.J., *et al.* 4-Norleucine, 7-D-phenylalanine-α-melanocyte-stimulating hormone: A highly potent α-melanotropin with ultralong biological activity. *Proc. Nat. Acad. Sci. USA* **77**(10), 5754-5758 (1980).
2. Hadley, M.E., Anderson, B., Heward, C.B., *et al.* Calcium-dependent prolonged effects on melanophores of [4-norleucine, 7-D-phenylalanine]-α-melanotropin. *Science* **213**(4511), 1025-1027 (1981).

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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