Ac-[Nle4,D-Phe7]-α-MSH (4-10)-NH2

Cat. No.:	HY-P3662
CAS No.:	82188-67-8
Molecular Formula:	$C_{47}H_{64}N_{14}O_{10}$
Molecular Weight:	985.1
Sequence Shortening:	Ac-{Nle}-EH-{d-Phe}-RWG-NH2
Target:	Tyrosinase
Pathway:	Metabolic Enzyme/Protease
Storage:	Sealed storage, away from moisture and light Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)

BIOLOGICAL ACTIVITY

Description	Ac-[Nle4,D-Phe7]-α-MSH (4-10)-NH2 is a melanotropin, a melanocyte-stimulating hormone. Ac-[Nle4,D-Phe7]-α-MSH (4-10)-NH2 stimulates tyrosinase and exhibits thermoregulatory effect in rats model[1][2].
In Vitro	Ac-[Nle4,D-Phe7]-α-MSH (4-10)-NH2 (0.1 pM-1 μM; 48 h) stimulates tyrosinase activity in a dose-dependent manner in Cloudman S91 mouse melanoma cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Ac-[Nle4,D-Phe7]-α-MSH (4-10)-NH2 (0-50 pM; i.c.v.; single dose) exerts thermoregulatory effect in rats model[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Rat model[2]
Dosage:	0, 0.5, 1, 5, 10, or 50 pM peptide in 0.5 μL sterile saline
Administration:	Intracerebroventricular injection in the anterior hypothalamic-preoptic area (AHPOA) of rats; single dose; recorded 0, 10, 20, 30, 40, 50, and 60 min after injection
Result:	Showed greater difference than mean temperatures of animals receiving sterile saline group.

REFERENCES

[1]. Marwan MM, et al. Stimulation of S91 melanoma tyrosinase activity by superpotent alpha-melanotropins. Mol Cell Endocrinol. 1985 Jul;41(2-3):171-7.

[2]. Lyn H, et al. α-Melanocyte-stimulating hormone (MSH) and [Nle4, D-Phe7]-α-MSH: Effects on core temperature in rats. Pharmacology Biochemistry and Behavior. 1993;44(3):533-538.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA