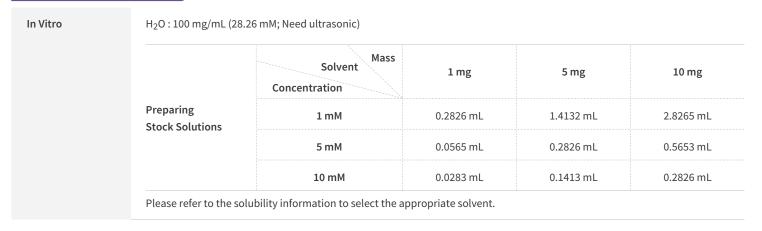
β -Endorphin, equine TFA

Cat. No.:	HY-P1866A		
Molecular Formula:	C ₁₅₅ H ₂₄₉ F ₃ N ₄₂ O ₄₆ S		
Molecular Weight:	3537.96		
Sequence:	Tyr-Gly-Gly-Phe-Met-Ser-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-A Ia-Ile-Ile-Lys-Asn-Ala-His-Lys-Lys-Gly-Gln		
Sequence Shortening:	YGGFMSSEKSQTPLVTLFKNAIIKNAHKKGQ		
Target:	Opioid Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Sealed storage, away from moisture Powder -80°C 2 years		
	-20°C 1 year		
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)		

SOLVENT & SOLUBILITY



BIOLOGICAL ACTIV	ТТҮ		
Description	β-Endorphin, equine TFA is an endogenous opioid peptide, which binds at high affinity to both μ/δ opioid receptors. β- Endorphin, equine TFA has analgesic properties ^{[1][2][3][4]} .		
IC ₅₀ & Target	δ Opioid Receptor/DOR	μ Opioid Receptor/MOR	
In Vitro	β -Endorphin, equine TFA (0, 0.6, 1.2 and 3 μM) inhibits the striatal dopamine release ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	MCE has not independently con	20 μg/kg; i.p., once) effects the acquisition and retention in the rat ^[3] . firmed the accuracy of these methods. They are for reference only. Adult Female Wistar rats ^[3]	

Product Data Sheet



Dosage:	2 or 20 μg/kg
Administration: Result:	2 or 20 μg/kg; i.p., once
	Hindered the acquisition of shuttle avoidance learning and habituation of a rearing response to a tone at a dose of 20 μ g/kg. Caused amnesia in the avoidance task with the pre- or post-training administration of 2 μ g/kg and pre-training administration of 20 μ g/kg

REFERENCES

[1]. Izquierdo I. Effects of a low and a high dose of beta-endorphin on acquisition and retention in the rat. Behav Neural Biol. 1980 Dec;30(4):460-4.

[2]. Loh HH, et al. beta-Endorphin in vitro inhibition of striatal dopamine release. Nature. 1976 Dec 9;264(5586):567-8.

[3]. Yahav Dikshtein, et al. β-Endorphin via the Delta Opioid Receptor is a Major Factor in the Incubation of Cocaine Craving. Neuropsychopharmacology. 2013 Nov; 38(12): 2508-2514.

[4]. Niinistö KE, et al. Plasma levels of heat shock protein 72 (HSP72) and beta-endorphin as indicators of stress, pain and prognosis in horses with colic. Vet J. 2010 Apr;184(1):100-4.

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