

## Product Data Sheet

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Product Name:  $\beta$ -Endorphin, equine TFA

Cat. No.: GC72132

### Chemical Properties

Cas. No.

Formula  $C_{154}H_{248}N_{42}O_{44}S \cdot xC_2HF_3O_2$  M.Wt 3423.94 (free acid)

Solubility  $H_2O$  : 100 mg/mL (Need ultrasonic) Storage Sealed storage, away from moisture

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

YGGFMSSEKSQTPLVTLFKNAIIKNAHKKGQ (TFA salt)

### Background

$\beta$ -Endorphin, equine TFA is an endogenous opioid peptide, which binds at high affinity to both  $\mu/\delta$  opioid receptors.  $\beta$ -Endorphin, equine TFA has analgesic properties.

$\beta$ -Endorphin, equine TFA (0, 0.6, 1.2 and 3  $\mu$ M) inhibits the striatal dopamine release [4].

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

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β-Endorphin, equine TFA (2 or 20 µg/kg; i.p., once) effects the acquisition and retention in the rat [3].

### References:

- [1]. 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.
- [2]. 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.
- [3]. 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.
- [4]. Loh HH, et al. beta-Endorphin in vitro inhibition of striatal dopamine release. *Nature*. 1976 Dec 9;264(5586):567-8.

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