**Proteins** 

# **Product** Data Sheet

# a-Helical Corticotropin Releasing Factor (12-41)

Cat. No.: HY-P3683 CAS No.: 158535-55-8

Molecular Formula:  $C_{152}H_{251}N_{43}O_{47}S_{2}$ 

Molecular Weight: 3497.01

Sequence Shortening: FHLLREMLEMAKAEQEAEQAALNRLLLEEA-NH2

Target: **CRFR** 

Pathway: GPCR/G Protein

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

## **BIOLOGICAL ACTIVITY**

Description

a-Helical Corticotropin Releasing Factor (12-41) is a 30 amino acids long, α-helical analogue of corticotropin releasing factor/hormone. Corticotropin releasing factor (CRF) is a hypothalamic hormone, which stimulates the secretion of adrenocorticotrophic hormone (ACTH). a-Helical Corticotropin Releasing Factor (12-41) would suppress the stimulatory  $effect^{[1][2]}$ .

In Vitro

a-Helical Corticotropin Releasing Factor (0.3 nM; 5-min pulses every 40 min alternately) shows the inhibitory effect on stimulated release of immunoreactive ACTH from perifused equine anterior pituitary cells in vitro. [2]. a-Helical Corticotropin Releasing Factor (0.5-5 μM) suppresses CRH-induced ACTH secretion<sup>[2]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

a-Helical Corticotropin Releasing Factor (12-41) (15-150 μg; s.c.; isolated for 30 or 60 min) suppresses the active behavioral response characteristic of guinea pig pups to brief isolation in novel surroundings[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Guinea pig pups (20-26 days old and ) $^{[1]}$
Dosage:	15, 50, 150 μg per animal
Administration:	Subcutaneous injection; isolated in novel surroundings for 30 min or 60 min.
Result:	Resulted pups vocalized more and exhibited more locomotor activity in 20- to 26-day-old pups.  Increased levels of vocalizing in isolated 4- to 6-day-old pups at 50 µg dose, though no changes were seen in locomotor activity.

### **REFERENCES**

[1]. Hennessy MB, et al. Evidence that endogenous corticotropin-releasing factor suppresses behavioral responses of guinea pig pups to brief isolation in novel surroundings. Dev Psychobiol. 1997 Jul;31(1):39-47.

[2]. Ellis M J, et al. The effects of corticotrophin-releasing hormone, arginine vasopressin and their antagonists on ACTH release from perifused horse anterior pituitary

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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