

# PRODUCT INFORMATION



## $\alpha$ -Helical CRF (9-41) (trifluoroacetate salt)

Item No. 35650

**Synonym:**  $\alpha$ -Helical Corticotropin-Releasing Factor (9-41)  
**Peptide Sequence:** DLTFHLLREMLEMAKAEQQEAALNRLLEEA-NH<sub>2</sub>  
**MF:** C<sub>166</sub>H<sub>274</sub>N<sub>46</sub>O<sub>53</sub>S<sub>2</sub> • XCF<sub>3</sub>COOH  
**FW:** 3,826.4  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years

H-Asp — Leu — Thr — Phe — His — Leu — Leu — Arg — Glu — Met —  
Leu — Glu — Met — Ala — Lys — Ala — Glu — Gln — Glu — Ala —  
Glu — Gln — Ala — Ala — Leu — Asn — Arg — Leu — Leu — Leu —  
Glu — Glu — Ala — NH<sub>2</sub>  
• XCF<sub>3</sub>COOH

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

### Laboratory Procedures

$\alpha$ -Helical CRF (9-41) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the  $\alpha$ -helical CRF (9-41) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas.  $\alpha$ -Helical CRF (9-41) (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of  $\alpha$ -helical CRF (9-41) (trifluoroacetate salt) in these solvents is approximately 30 mg/ml.

### Description

$\alpha$ -Helical CRF (9-41) is a synthetic peptide antagonist of corticotropin-releasing factor (CRF).<sup>1</sup> It inhibits CRF-induced adrenocorticotrophic hormone (ACTH) release from isolated rat anterior pituitary cells when used at concentrations ranging from 0.5 to 5  $\mu$ M. *In vivo*,  $\alpha$ -helical CRF (9-41) (0.02-0.6  $\mu$ mol/kg) inhibits CRF-induced ACTH release in non-anesthetized, intact rats. It also inhibits stress-induced ACTH release in rats when administered at a dose of 0.6  $\mu$ mol/kg.  $\alpha$ -Helical CRF (9-41) increases social interaction time in a rat model of nicotine-induced conditioned anxiety.<sup>2</sup> It also reduces binge-like ethanol consumption in mice.<sup>3</sup>

### References

1. Rivier, J., Rivier, C., and Vale, W. Synthetic competitive antagonists of corticotropin-releasing factor: Effect on ACTH secretion in the rat. *Science* **224**(4651), 899-891 (1984).
2. Tucci, S., Cheeta, S., Seth, P., *et al.* Corticotropin releasing factor antagonist, alpha-helical CRF(9-41), reverses nicotine-induced conditioned, but not unconditioned, anxiety. *Psychopharmacol. (Berl)* **167**(3), 251-256 (2003).
3. Lowery, E.G., Spanos, M., Navarro, M., *et al.* CRF-1 antagonist and CRF-2 agonist decrease binge-like ethanol drinking in C57BL/6J mice independent of the HPA axis. *Neuropsychopharmacology* **35**(6), 1241-1252 (2010).

#### 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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