

PRODUCT INFORMATION



Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ (trifluoroacetate salt)

Item No. 41469

Formal Name: 3-((4R,7S,10S,13R,16S,19S,22R)-16-((1H-imidazol-5-yl)methyl)-7-((1H-indol-3-yl)methyl)-22-((R)-2-acetamido-5-guanidinopentanamido)-13-benzyl-4-carbamoyl-10-(3-guanidinopropyl)-6,9,12,15,18,21-hexaoxo-1,2-dithia-5,8,11,14,17,20-hexaazacyclotricosan-19-yl)propanoic acid, trifluoroacetate salt

Synonym: Ac-dR[CEHdFRWC]-NH₂

Peptide Sequence: Ac-rCEHfRWC-NH₂

MF: C₅₁H₇₀N₁₈O₁₁S₂ • XCF₃COOH

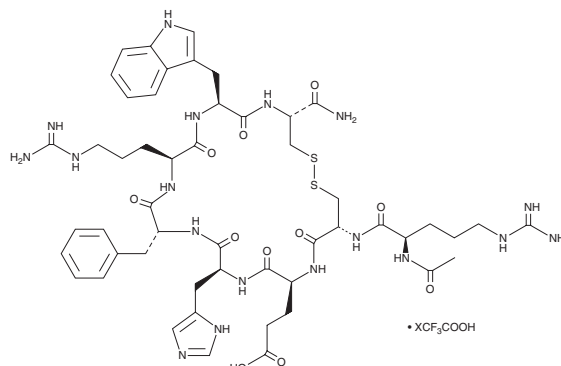
FW: 1,175.4

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ is supplied as a solid. A stock solution may be made by dissolving the Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ in the solvent of choice, which should be purged with an inert gas. Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ is soluble (≥10 mg/ml) in organic solvents such as ethanol and DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ can be prepared by directly dissolving the solid in aqueous buffers. Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ is soluble (≥10 mg/ml) in PBS (pH 7.2).

Description

Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ is a cyclic peptide and an agonist of melanocortin receptor 4 (MC4R).¹ It induces cAMP release in HEK293 cells expressing human MC4R (EC₅₀ = 0.28 nM). Ac-(D-Arg)-CEH-(D-Phe)-RWC-NH₂ is selective for MC4R over MC1R, MC3R, and MC5R (K_s = 0.55, 16.78, 56.79, and >500 nM, respectively). It decreases food intake and body weight in a rat model of diet-induced obesity when administered at doses of 0.075 or 0.299 μmol/kg.

Reference

1. Mayer, J.P., Hsiung, H.M., Flora, D.B., *et al.* Discovery of a β-MSH-derived MC-4R selective agonist. *J. Med. Chem.* **48**(9), 3095-3098 (2005).

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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