

PRODUCT INFORMATION



Setmelanotide (trifluoroacetate salt)

Item No. 35564

Formal Name: cyclic (2→8)-disulfide N²-acetyl-L-arginyl-L-cysteinyl-D-alanyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinamide, trifluoroacetate salt

Synonyms: BIM-22493, N-acetyl-RCAHFRWC-NH₂, RM-493

MF: C₄₉H₆₈N₁₈O₉S₂ • XCF₃COOH

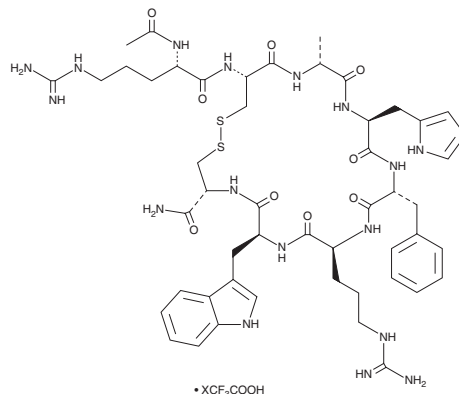
FW: 1,117.3

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

Setmelanotide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the setmelanotide (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Setmelanotide is a cyclic peptide agonist of melanocortin receptor 4 (MC4R).¹ It increases cAMP production in CHO-K1 cells expressing MC4R, MC1R, MC3R, and MC5R (EC₅₀s = 0.27, 5.8, 5.3, and 1,600 nM, respectively, for the human receptors) but not in cells expressing MC2R (EC₅₀ = >10 μM). Setmelanotide (6.4 μmol/animal) inhibits food intake in MC3R, but not MC4R, knockout mice. It also reduces food intake and hepatosteatosis, induces weight loss, and decreases serum insulin, glucose, and leptin levels in a mouse model of diet-induced obesity when administered at a dose of 300 nmol/kg per day. Formulations containing setmelanotide have been used in chronic weight management due to proopiomelanocortin (POMC), proprotein convertase subtilisin/kexin type 1 (PCSK1), or leptin receptor deficiency.

Reference

1. Kumar, K.G., Sutton, G.M., Dong, J.Z., *et al.* Analysis of the therapeutic functions of novel melanocortin receptor agonists in MC3R- and MC4R-deficient C57BL/6J mice. *Peptides* **30(10)**, 1892-1900 (2009).

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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