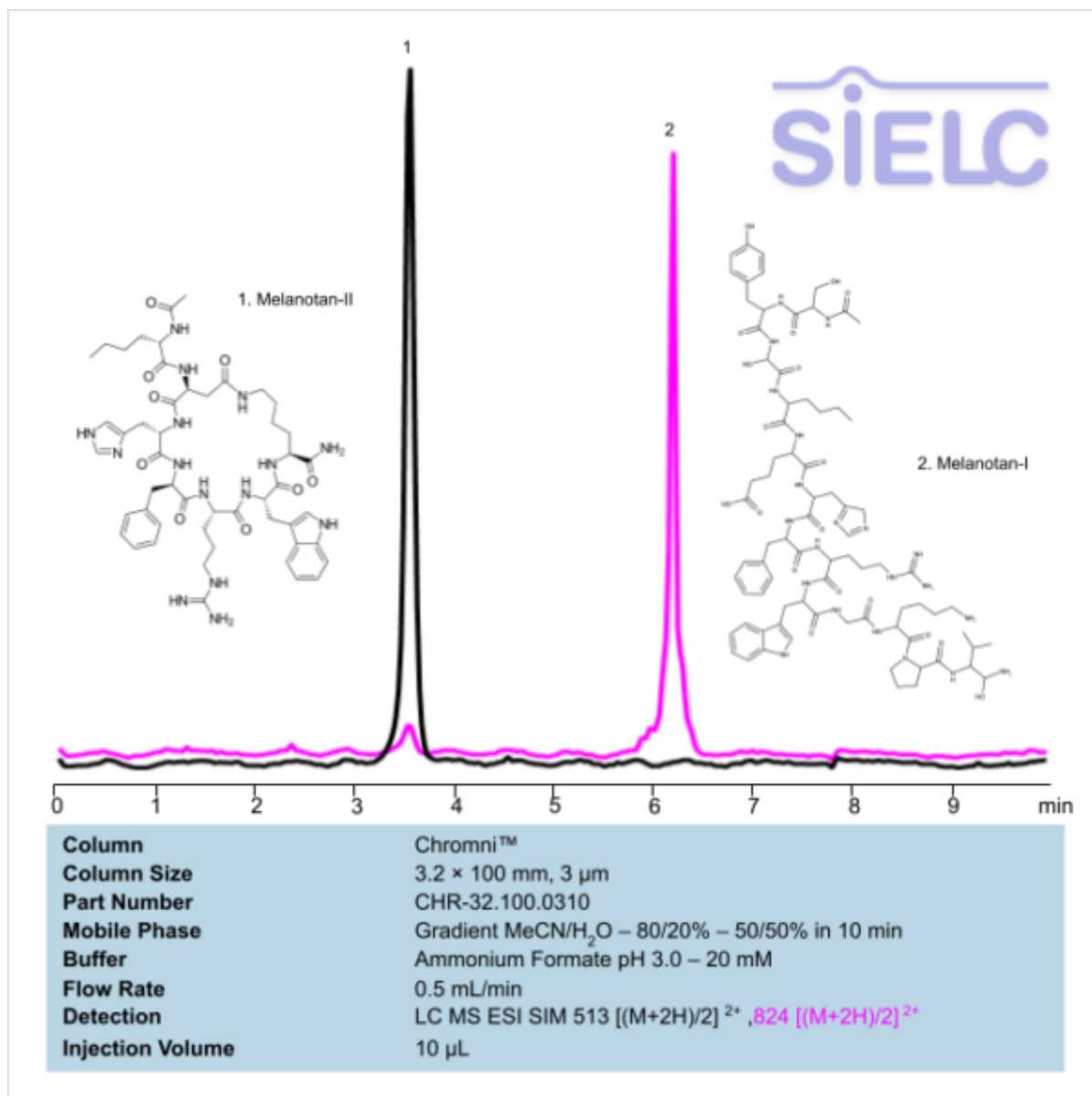


HPLC MS Method for Analysis of Melanotan 1 and Melanotan 2 on Chromni Column

<https://sielc.com/hplc-lc-ms-analysis-of-melanotan-1-2>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Melanotan-I , Melanotan-II

Melanotan-I is a synthetic analogue of α -melanocyte-stimulating hormone (α -MSH) with the chemical formula C₇₈ H₁₁₁ N₂₁ O₁₉. It is used primarily to provide photoprotection against UV radiation as well as for patients with erythropoietic protoporphyria to increase pain-free light exposure. It is used “off-label” as a synthetic tanner, for which it is not FDA approved.

Melanotan-II is a synthetic analogue of peptide hormone α -melanocyte-stimulating hormone (α -MSH) with the chemical formula C₅₀ H₆₉ N₁₅ O₉. It is approved by the FDA to treat sun sensitivity, but unlabeled Melanotan II is sold as a tanning agent, though health agencies advise against it due to reports of it being a health risk. It works as a non-selective agonist of the melanocortin receptors.

Melanotan-I , Melanotan-II can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with an sulfuric acid as a buffer. Detection is performed using LC MS.

Method Parameters

Mobile Phase	Gradient MeCN – 80 – 20%, 10 min
Buffer	AmFm pH3.0 – 20mM
Flow Rate	0.5 ml/min
Detection	LC MS ESI SIM 513 [(M+2H)/2] ²⁺ ,824 [(M+2H)/2] ²⁺
Class of Compounds	Analogue
Analyzing Compounds	Melanotan-I,Melanotan-II

HPLC Column Used

Chromni, 3.2 x 100 mm, 3 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](http://hplc-shop.de)