

HPLC MS Method for Analysis of Copper Peptide GHK-Cu on Primesep 200 Column

<https://sielc.com/hplc-method-for-analysis-of-ghk-cu>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Copper peptide (GHK-Cu)

Copper Peptide GHK-Cu is a naturally occurring copper complex with the molecular formula $C_{14}H_{22}CuN_6O_4 \cdot C_2H_4O_2$. Research shows that the complex facilitates faster wound healing, improved angiogenesis, and elevated level of antioxidant enzymes. Often times, it is used in anti-aging cosmetics.

Copper peptide (GHK-Cu) can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a ammonium formate buffer. Detection is performed using LC MS.

*LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

Method Parameters

Mobile Phase	MeCN – 20%
Buffer	Ammonium formate
Flow Rate	0.5 ml/min
Detection	LC MS ESI GHK (free peptide, [M+H] ⁺) 341
Class of Compounds	Complex
Analyzing Compounds	Copper peptide (GHK-Cu)

HPLC Column Used

Primesep 200, 3.2 x 150 mm, 5 µm, 100 Å, dual ended

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