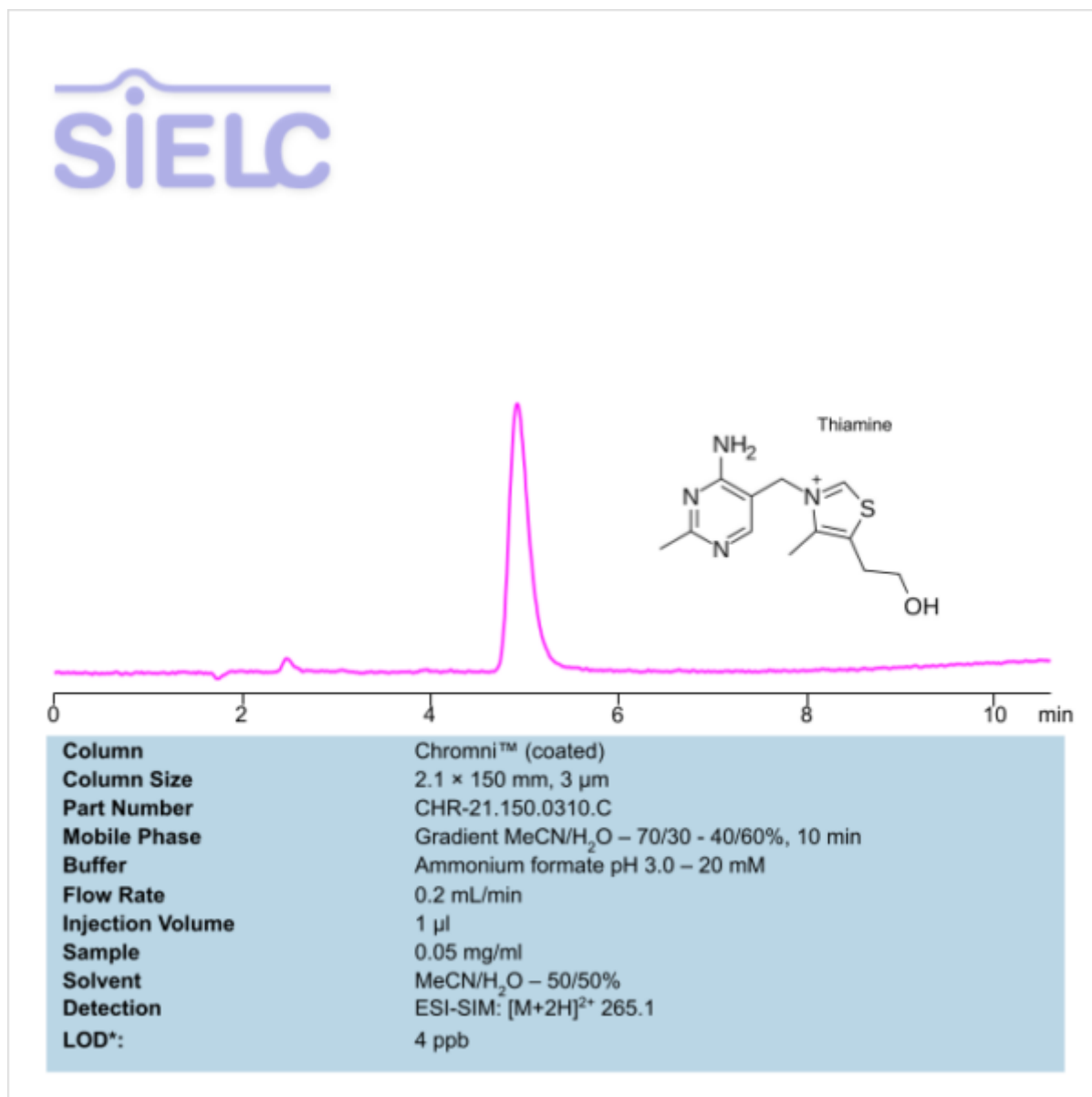


HPLC LC MS Method for Analysis of Thiamine on Chromni Column

<https://sielc.com/hplc-method-for-lc-ms-analysis-of-thiamine>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Vitamin B1 (Thiamine) .

Thiamine , also known as vitamin B1 , is an essential nutrient with the chemical formula C₁₂ H₁₇ ClN₄ OS . It plays a crucial role in energy metabolism and the proper functioning of the nervous system. It helps the body convert carbohydrates into energy and is vital for the growth, development, and function of cells. You can find detailed UV spectra of Vitamin B1 (Thiamine) and information about its various lambda maxima by visiting the following link.

Vitamin B1 (Thiamine) can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes an gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a ammonium formate buffer. Detection is performed using LC MS.

Method Parameters

Mobile Phase	Gradient MeCN/H ₂ O – 70/30 – 40/60%, 10 min
Buffer	Ammonium formate pH 3.0 – 20 mM
Flow Rate	0.2 ml/min
Detection	ESI-SIM: [M+2H] ²⁺ 265.1
Limit Of Detection*	4 ppb
Class of Compounds	Vitamin
Analyzing Compounds	Vitamin B1 (Thiamine)

HPLC Column Used

Chromni, 2.1 x 150 mm, 3 µm, 100 Å, surface coated

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