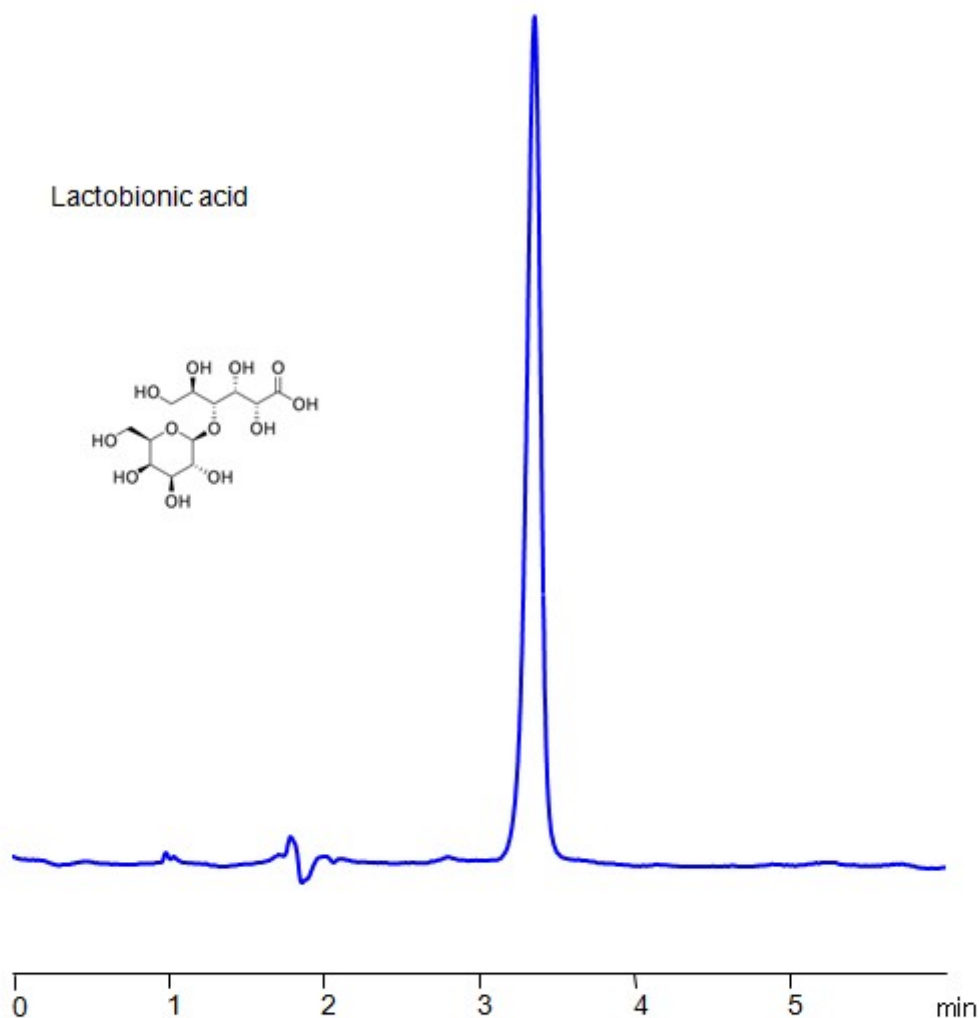


HPLC Method for Analysis of Lactobionic Acid on Newcrom BH Column

<https://sielc.com/hplc-determination-of-lactobionic-acid>

Chromatogram



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm, 100A
Column part number:	NBH-46.150.0510
Mobile phase:	MeCN/H ₂ O – 80/20%
Buffer:	HClO ₄ – 0.1%
Flow rate:	1.0 mL/min
Detection:	UV 190 nm
Sample:	1 mg/ml in MeCN/H ₂ O- 50/50%
Injection volume:	5 µl
LOD:	1 ppm

Description

· HPLC Method for Analysis of Lactobionic acid on Newcrom BH Column by SIELC Technologies

Lactobionic Acid is a compound derived from lactose, a sugar found in milk, with the chemical formula C₁₂ H₂₂ O₁₂. It is a bionic acid, which is a type of sugar acid that contains both a sugar and a carboxylic acid group. Lactobionic acid has

applications in various industries, including pharmaceuticals, cosmetics, and food production, due to its properties such as antioxidant activity and its ability to chelate metal ions. In pharmaceuticals, it is used as an excipient in formulations, while in cosmetics, it is found in skincare products for its hydrating and exfoliating properties. Additionally, it is used as a food additive, particularly in processed foods, as a stabilizer and antioxidant.

Lactobionic acid can be retained and analyzed on a reversed-phase Newcrom BH column with a mobile phase consisting of water, Acetonitrile (MeCN), and perchloric acid. This analytical method can be detected with high resolution and peak symmetry at a wavelength of 190 nm using UV detection

Method Parameters

Mobile Phase	MeCN/H ₂ O – 80/20%
Buffer	HClO ₄ – 0.1%
Flow Rate	1.0 ml/min
Detection	UV 190 nm
Injection volume:	3 µL
Sample	1 mg/ml
Sample Diluent	MeCN/H ₂ O – 50/50%
LOD*	1 ppm
Class of Compounds	Acid
Analyzing Compounds	Lactobionic acid

HPLC Column Used

Newcrom BH, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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