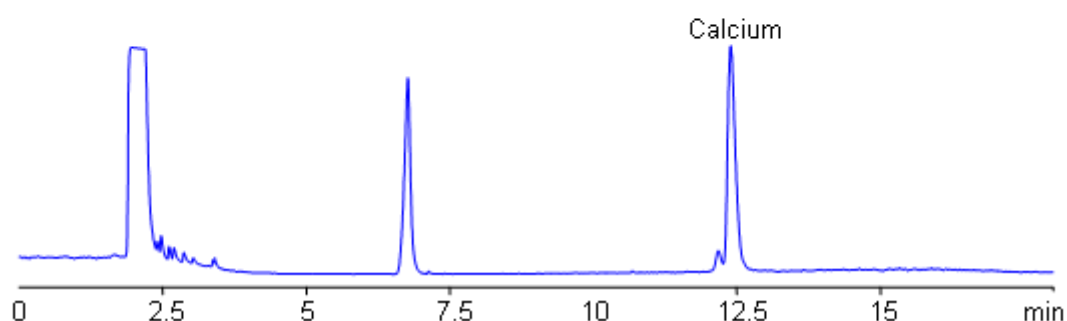


HPLC Analysis of Calcium Ions in Maple Syrup

<https://sielc.com/HPLC%20Analysis%20of%20Calcium%20Ions%20in%20Maple%20Syrup>

Chromatogram

Column: Primesep 100
Size: 4.6 x 150 mm
Mobile phase: MeCN gradient 5-50% in 12 min 4 min hold, TFA gradient 0.03-0.2% in 12 min 4 min hold
Flow: 1.0 mL/min
Detection: ELSD
Injection: 10 µL
Sample: 200 mg/ml



Description

Application Notes: maple syrup primarily consists of sucrose and other sugars, but also has small amounts of amino acids (arginine, threonine, proline), organic acids (malic and fumaric), vitamins (niacin and riboflavin) and traces of minerals (Na, K, Ca, Mn, Mg, Zn ions). One analysis performed on maple syrup is calcium ion determination. A Primesep 100 column was used in cation-exchange mode to isolate calcium ion from other components of the maple syrup. This method can be used for quantification of calcium ion by ELSD/CAD. Limit of detection depends on the type of ELSD/CAD detector used but usually reaches 20 ppm

Application Columns: Primesep 100 Application compounds: calcium ions, Maple Syrup Detection technique: LC/MS, ELSD/CAD

Method Parameters

Mobile Phase	MeCN/H ₂ O
Buffer	TFA
Flow Rate	1.0 ml/min
Detection	ELSD
Class of Compounds	Ions, Hydrophilic, Ionizable
Analyzing Compounds	Maple Syrup, Calcium

HPLC Column Used

Primesep 100, 4.6×150 mm, 5 µm, 100A

[Order this column at hplc-shop.de →](#)