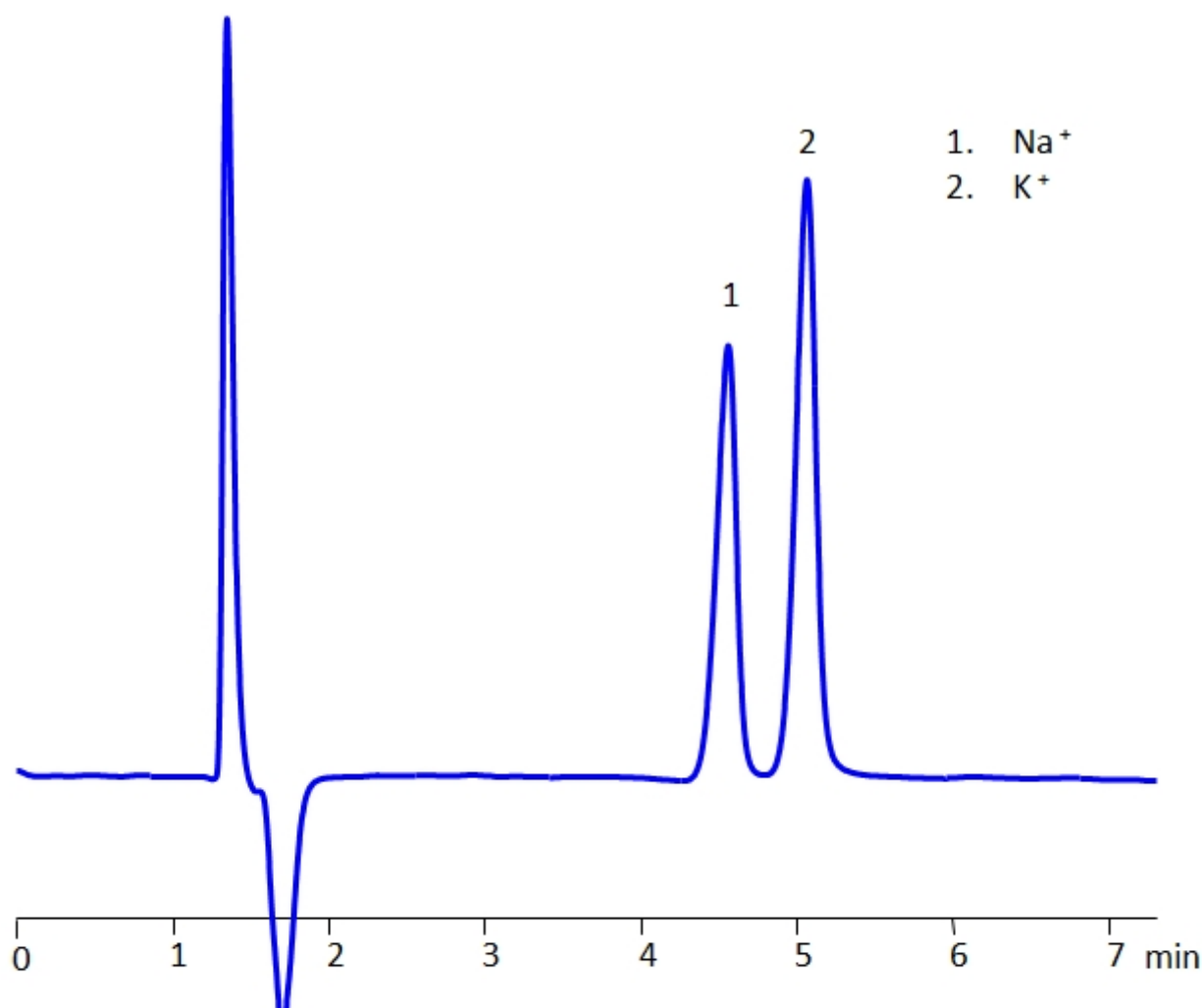


Separation of Sodium and Potassium Ions on Newcrom AH Column

<https://sielc.com/separation-of-sodium-and-potassium-ions-on-newcrom-ah-column>

Chromatogram



Column:	Newcrom AH
Column size:	4.6 × 150 mm, 5 μm
Mobile phase:	MeCN – 50 %
Buffer:	Methanesulfonic acid - 10 mM
Flow rate:	1 ml/min
Detection:	Conductivity

Description

Sodium Ions, Na⁺, are crucial for regulating fluid balance, transporting nutrients, and generating electrical signals within a body.

Potassium ions, K⁺, are essential for cell function. They work as charge carriers inside animal cells to create the membrane. Imbalance of potassium can lead to debilitating health problems, but consumption of it through a diet can help regulate the negative effects of sodium on blood flow.

Sodium and potassium ions can be separated on a mixed-mode Newcrom AH column with a simple isocratic mobile phase of water, acetonitrile (ACN) and methanesulfonic acid. It can be detected using a conductivity detector.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 50/50%
Buffer	Methanesulfonic acid – 10 mM
Flow Rate	1.0 ml/min
Detection	Conductivity
Class of Compounds	Hydrophilic, Metal, Ion
Analyzing Compounds	Sodium, Potassium

HPLC Column Used

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

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