

Gradient Separation of Nutrients on ACQUITY UPLC BEH HILIC

Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

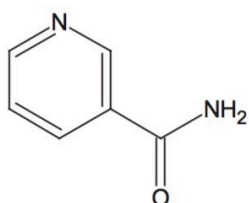
Abstract

This application brief demonstrates the gradient separation of nutrients on ACQUITY UPLC BEH HILIC Columns.

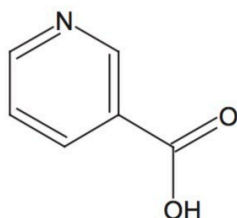
Introduction

The compounds used in this study are:

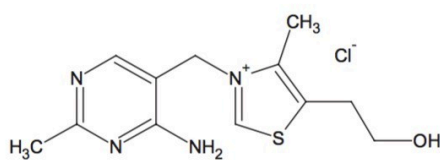
1. Nicotinamide
2. Nicotinic acid
3. Thiamine



Nicotinamide



Nicotinic acid



Thiamine

Experimental

Test Conditions

Column: ACQUITY UPLC BEH HILIC, 2.1 x 50 mm, 1.7 μm

Part Number: 186003460

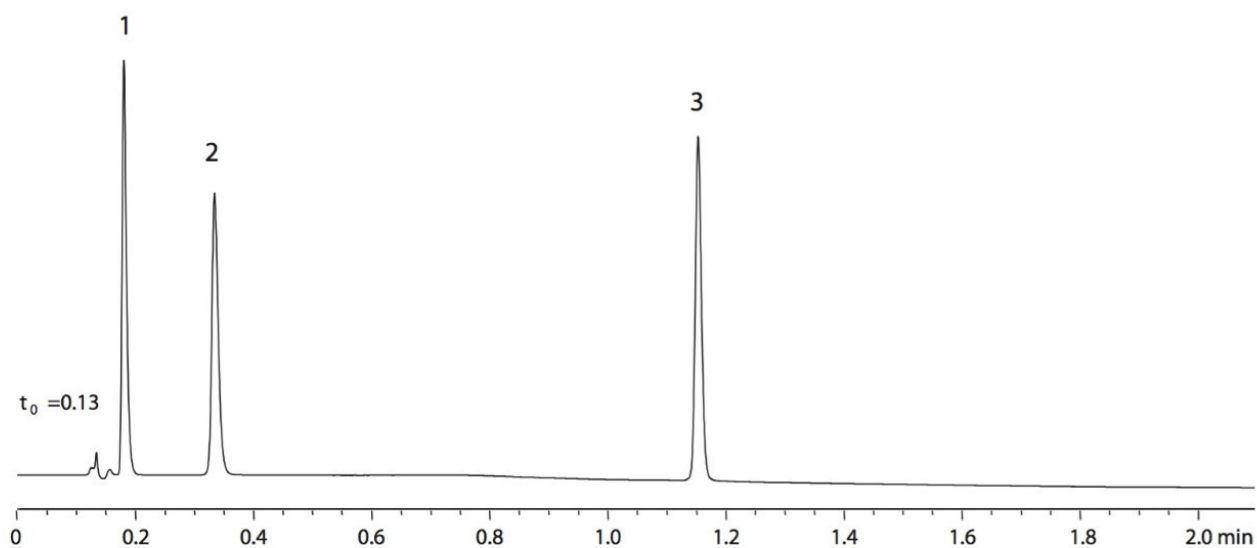
Mobile Phase A:	10 mM NH ₄ COOH in H ₂ O, 0.125% HCOOH in 50:50 ACN:H ₂ O
Mobile Phase B:	10 mM NH ₄ COOH in H ₂ O, 0.125% HCOOH in 90:10 ACN:H ₂ O
Flow Rate:	1.235 mL/min
Injection Volume:	5 µL
Sample Concentration:	25 µg/mL each
Sample Diluent:	75:25 ACN:MeOH with 0.2% HCOOH
Column Temperature:	30 °C
Sample Temperature:	15 °C
Detection:	UV @ 268 nm
Sampling Rate:	40 points/sec
Time Constant:	0.1
Weak Needle Wash:	ACN/H ₂ O 95/5
Instrument:	Waters ACQUITY UPLC with ACQUITY PDA

Gradient

Time(min)	Profile
	%A

Time(min)	Profile
0.00	0.1
0.51	0.1
2.11	99.9
2.19	0.1
2.91	0.1

Results and Discussion



Featured Products

- [ACQUITY UPLC System <https://www.waters.com/514207>](https://www.waters.com/514207)
- [ACQUITY UPLC PDA Detector <https://www.waters.com/514225>](https://www.waters.com/514225)

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