Waters™

Application Note

Gradient Separation of Nutrients on XBridge HILIC

Waters Corporation

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

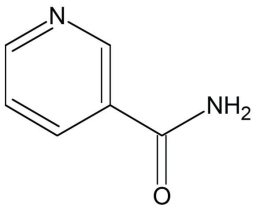
Abstract

This application note demonstrates the gradient separation of nutrients on XBridge HILIC.

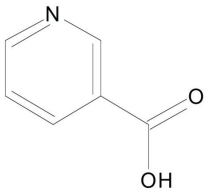
Introduction

The compounds used in this study are:

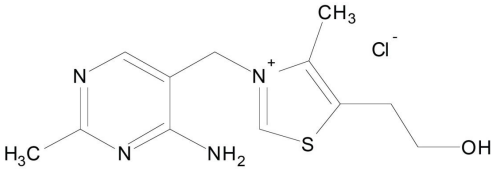
1. Nicotinamide
2. Nicotinic acid
3. Thiamine



Nicotinamide



Nicotinic acid



Thiamine

Experimental

Method Conditions

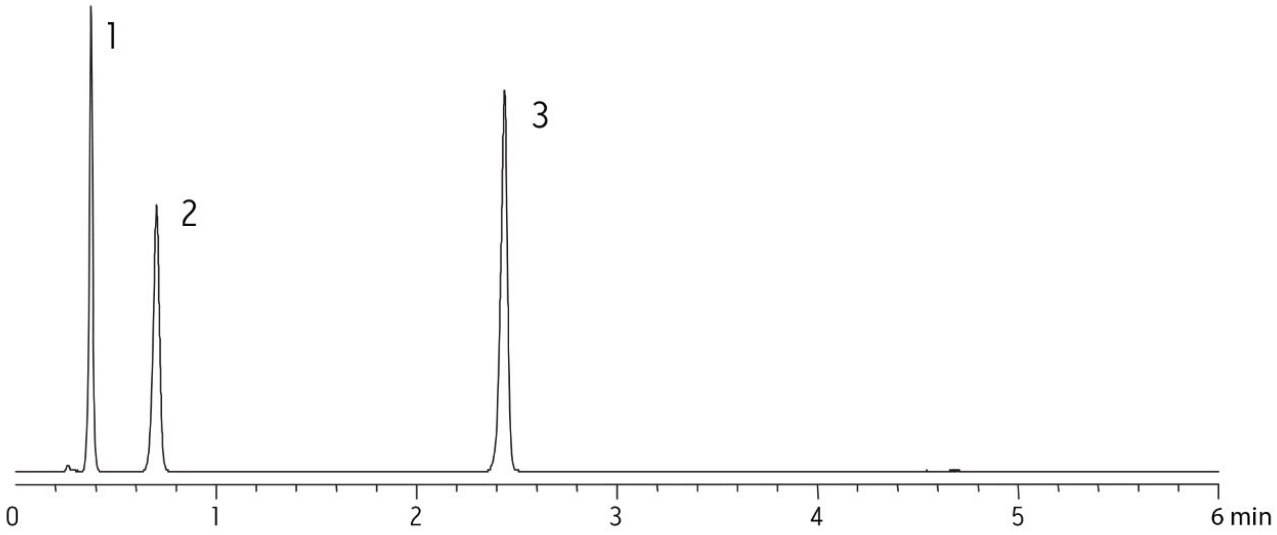
Column:	XBridge HILIC, 2.1 x 50 mm, 3.5 µm
Part Number:	186004432
Mobile Phase A:	10 mM NH_4COOH in H_2O, 0.125% HCOOH in 50:50 ACN:H_2O
Mobile Phase B:	10 mM NH_4COOH in H_2O, 0.125% HCOOH in 90:10 ACN:H_2O
Flow Rate:	0.6 mL/min

Injection Volume:	5 µL
Sample Concentration:	25 µg/mL each
Sample Diluent:	75:25 ACN:MeOH with 0.2% HCOOH
Column Temperature:	30 °C
Detection:	UV @ 268 nm
Sampling Rate:	40 points/sec
Filter Time Constant:	0.1
Instrument:	Waters ACQUITY UPLC with ACQUITY PDA

Gradient

Time (min)	Profile	
	%A	%B
0.00	0.1	99.9
1.05	0.1	99.9
4.35	99.9	0.1
4.50	0.1	99.9
6.00	0.1	99.9

Results and Discussion



Featured Products

ACQUITY UPLC PDA Detector <https://www.waters.com/514225>

WA64075, August 2009