

ACQUITY UPLC HILIC Gradient Separation of Ascorbic Acid and Isoascorbic Acids

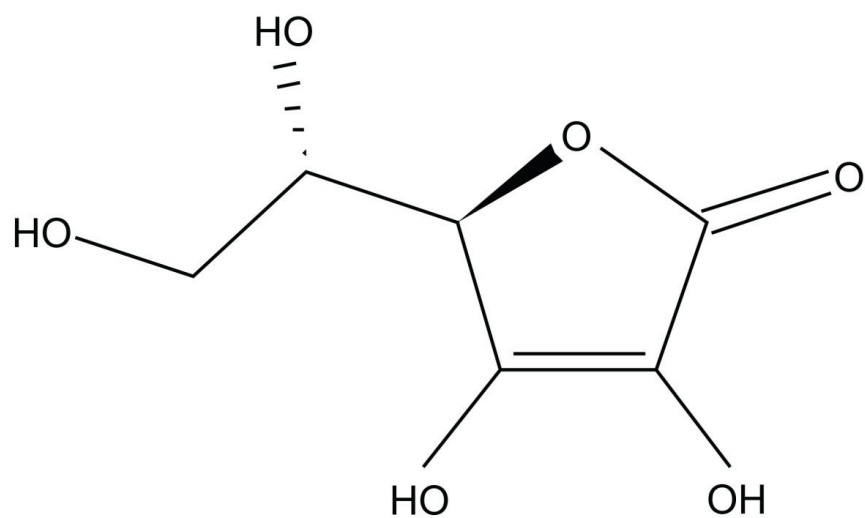
Waters Corporation

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

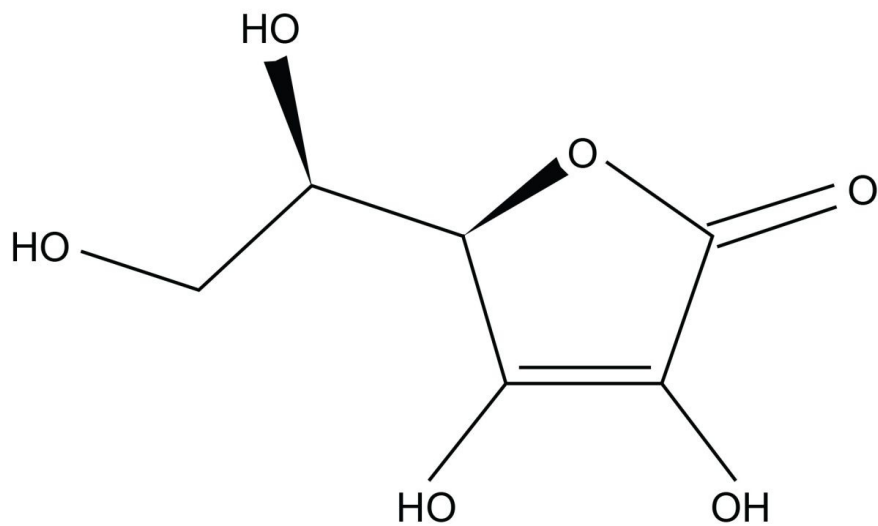
Abstract

This application brief highlights the gradient separation of ascorbic acid and isoascorbic acids using ACQUITY UPLC BEH Amide Columns.

Introduction



Ascorbic Acid



Isoascorbic Acid

Experimental

Test Conditions

Columns:	ACQUITY UPLC BEH Amide, 2.1 x 100 mm, 1.7 μ m
Part Number:	186004801
Mobile Phase A:	50/50 MeCN/H ₂ O with 10 mM CH ₃ COONH ₄ and 0.02% CH ₃ COOH, pH 5.0
Mobile Phase B:	90/10 MeCN/H ₂ O with 10 mM CH ₃ COONH ₄ and 0.02% CH ₃ COOH, pH 5.0
Flow Rate:	0.2 mL/min
Injection Volume:	5.0 μ L (PLNO)
Sample Concentration:	30 μ g/mL each
Sample Diluent:	75/25 MeCN/MeOH with 0.2% HCOOH
Column Temperature:	25 $^{\circ}$ C
Weak Needle Wash:	95/5 MeCN/H ₂ O
Detection:	UV @ 260nm
Sampling Rate:	20 points/sec
Filter Time Constant:	0.2

Instrument:

Waters ACQUITY UPLC with ACQUITY UPLC PDA
Detector

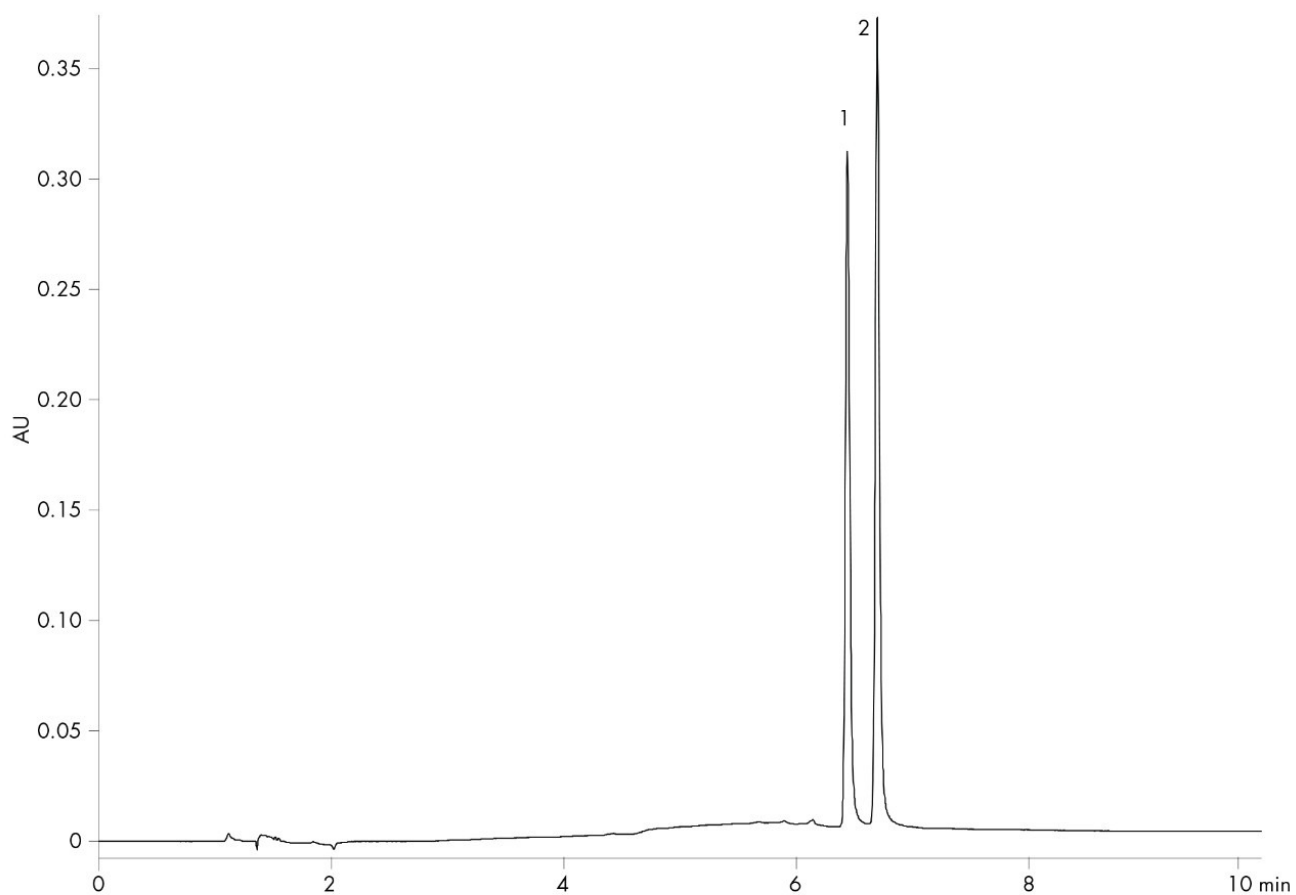
Gradient

Time (min)	Profile	
	%A	%B
Initial	0.1	99.9
10.00	99.9	0.1
10.01	0.1	99.9
15.00	0.1	99.9

Results and Discussion

The compounds used in this study are:

1. Isoascorbic acid
2. Ascorbic acid



Featured Products

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

WA60105, June 2009

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