Waters™

Application Note

ACQUITY UPLC HILIC Isocratic Separation of Isoascorbic acid and ascorbic acid

Waters Corporation

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

Abstract

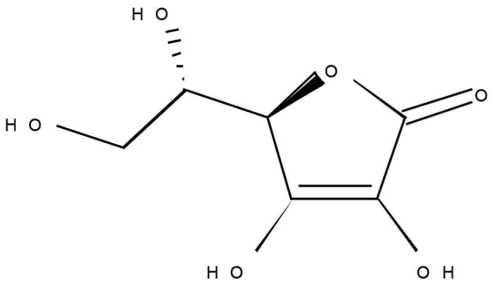
This application brief demonstrates the separation of isoascorbic acid and ascorbic acid.

Introduction

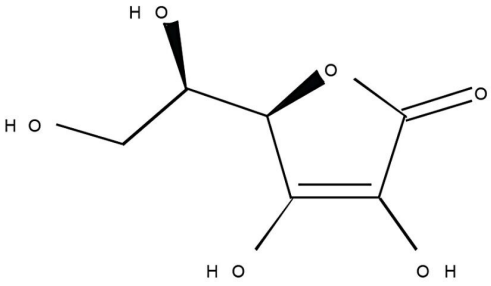
Compounds which are studied in this application brief are:

1. Isoascorbic acid
2. Ascorbic acid

Structures



Ascorbic acid



Isoascorbic acid

Experimental

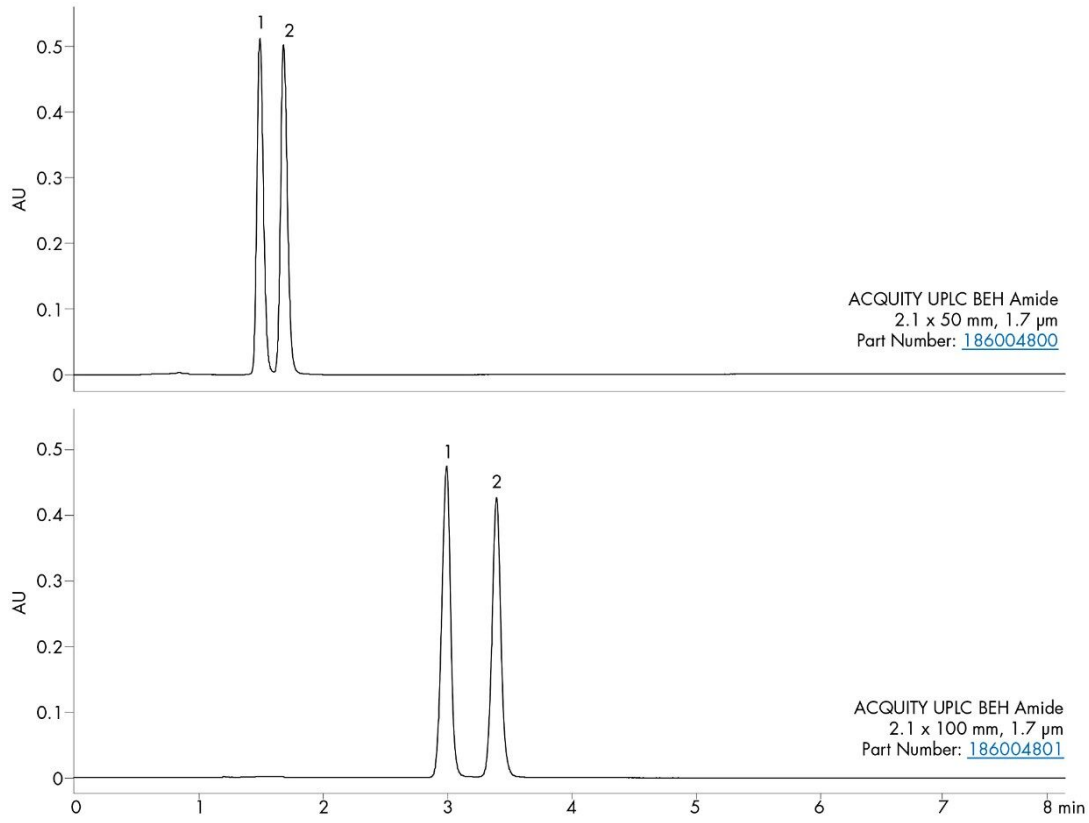
Test Conditions

Chromatographic Conditions

Column:	ACQUITY UPLC BEH Amide,
Isocratic Mobile Phase:	80/20 MeCN/H_2O with 10 mM KH_2PO_4, pH 4.6
Flow Rate:	0.2 mL/min
Injection Volume:	5.0 µL (PLNO)

Sample Concentration:	30 µg/mL each
Sample Diluent:	75/25 MeCN/MeOH with 0.2% HCOOH
Column Temperature:	25 °C
Weak Needle Wash:	95/5 MeCN/H_2O
Detection:	UV @ 260nm
Sampling Rate:	20 points/sec
Filter Time Constant:	0.2
Instrument:	Waters ACQUITY UPLC with ACQUITY UPLC PDA Detector

Results and Discussion



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ACQUITY UPLC System <https://www.waters.com/514207>

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

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