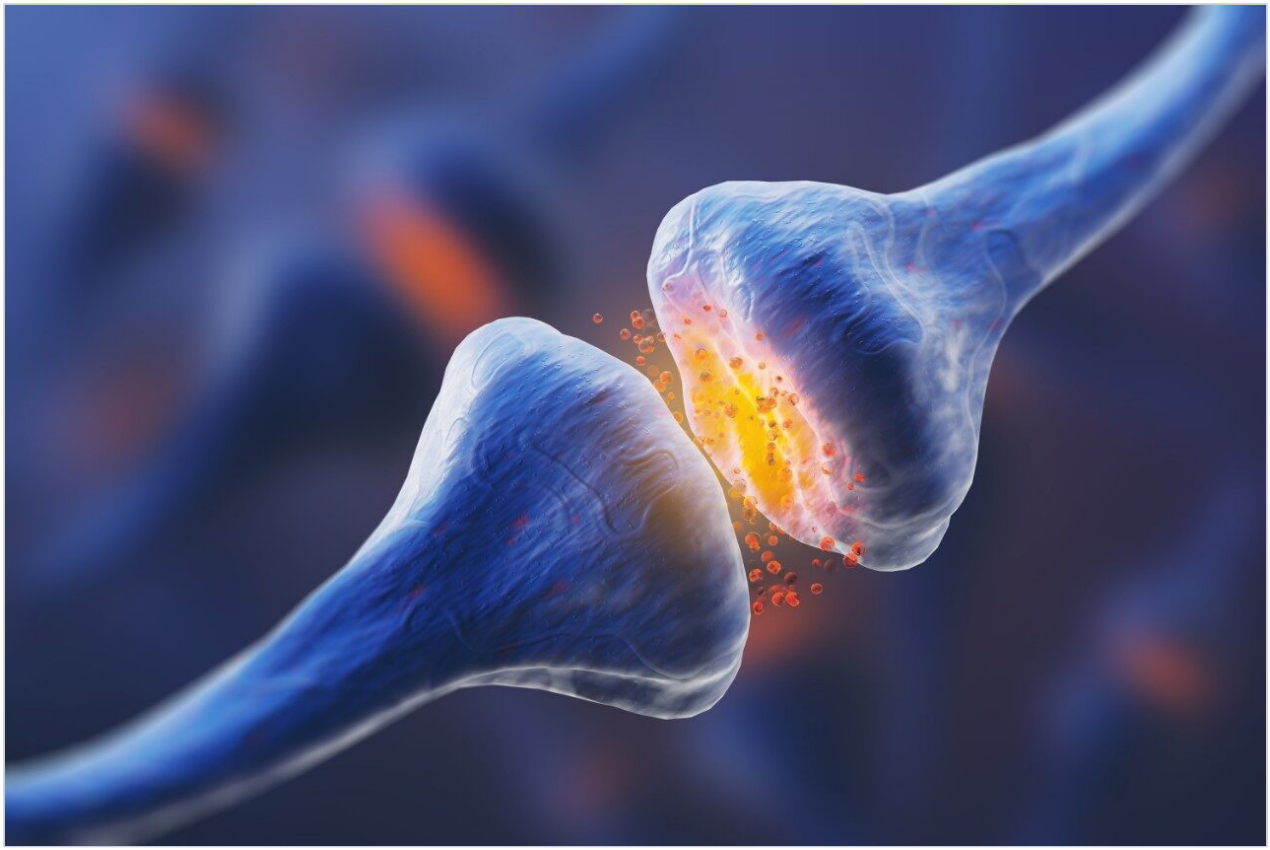
Waters™

LC-MS Isocratic Separation of Neurotransmitters on XBridge HILIC

Waters Corporation



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

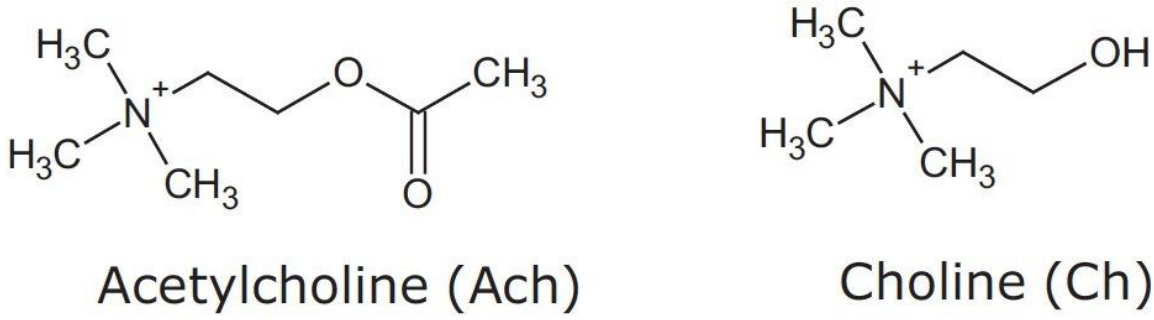
Abstract

This application brief demonstrates the LC-MS isocratic separation of neurotransmitters on XBridge HILIC Column.

Introduction

The compounds used in this study are:

1. Acetylcholine (Ach)
2. Choline (Ch)



Experimental

LC Conditions

Column:	XBridge HILIC, 2.1 x 50 mm, 3.5 µm
Part number:	186004432
Mobile phase A:	10 mM NH_4COOH with 0.125% HCOOH in H_2O

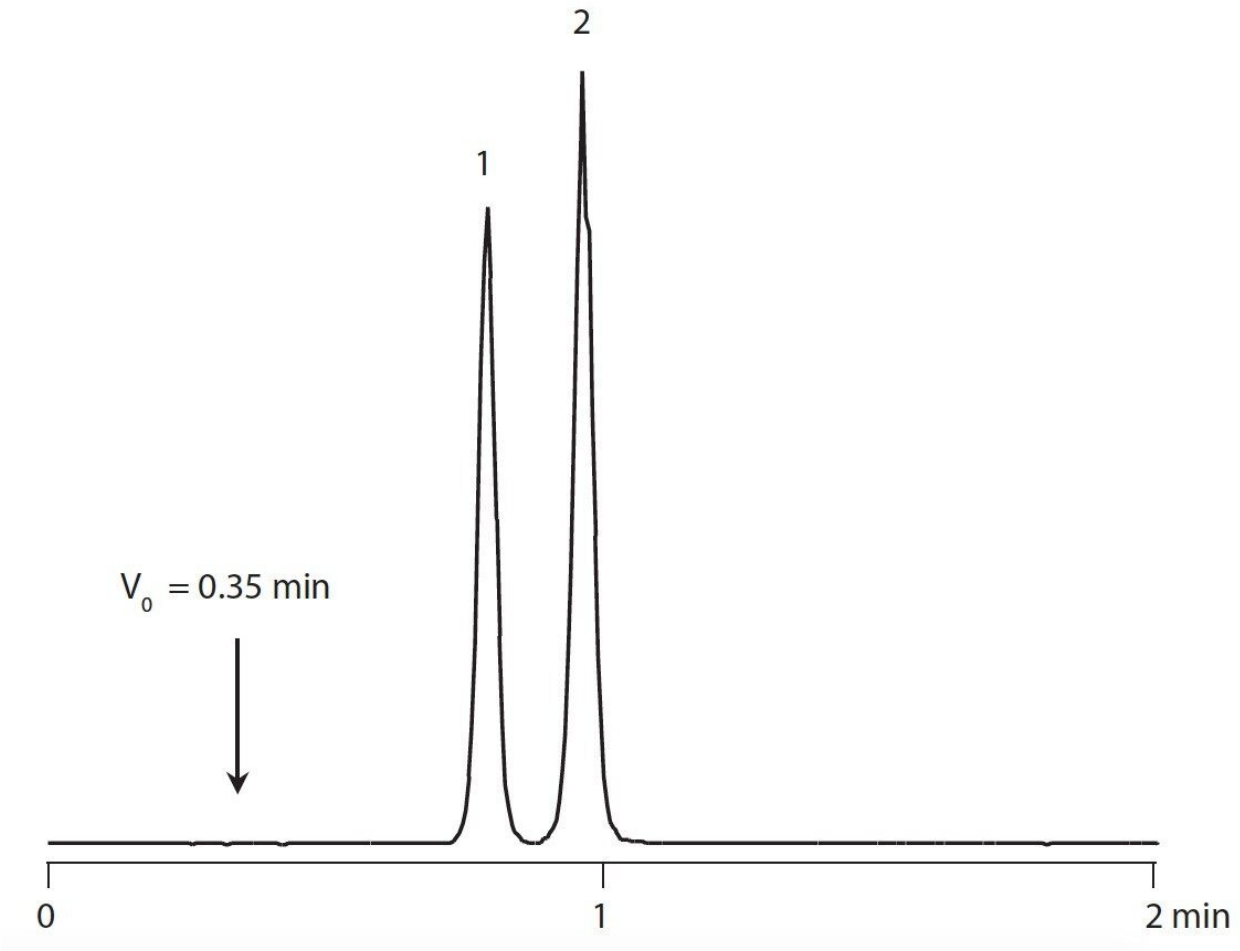
Mobile phase B:	10 mM NH_4COOH with 0.125% HCOOH in 90:5:5 ACN:MeOH:H_2O
Isocratic mobile phase composition:	10% A; 90% B
Flow rate:	0.5 mL/min
Injection volume:	10.0 µL (full loop)
Sample diluent:	75:25 ACN:MeOH with 0.2% HCOOH
Sample concentration:	5 ng/mL each
Column temperature:	30 °C
Weak and strong needle wash:	95:5 ACN:H_2O
Detection:	MS
Sampling rate:	5 points/sec
Instrument:	Waters ACQUITY UPLC with TQD

MS Conditions

Ionization mode:	ES+
Capillary:	0.5 kV
Cone:	40 V (choline), 25 V (acetylcholine)
Source temperature:	120 °C
Desolvation temperature:	350 °C

Desolvation gas flow:	800 L/Hr
SIR:	146.1 *m/z* (acetylcholine); 104.0 m/z (choline)
Dwell time:	150 msec
ISD:	10 msec
ICD:	10 msec

Results and Discussion



Featured Products

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

WA64076, August 2009