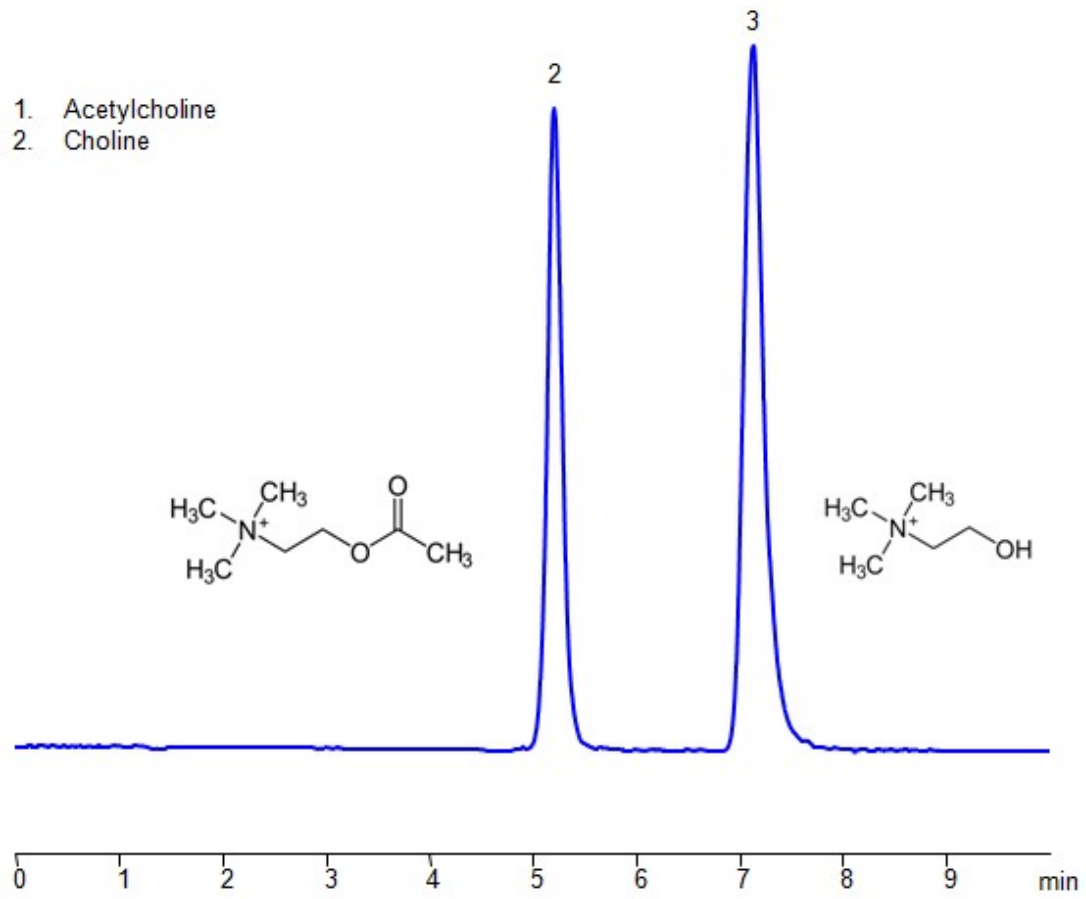
HPLC ELSD Method for Analysis Acetylcholine and Choline on Obelisc R Column

https://sielc.com/hplc-method-for-analysis-acetylcholine-2

Chromatogram



Column:	Obelisc R
Column size:	2.1 × 100 mm, 5 µm
Column part number:	OR-21.100.0510
Mobile phase:	MeCN/H_2O – 60/40%
Buffer:	Ammonium acetate pH 5.0 – 10 mM
Flow rate:	0.2 mL/min
Sample:	0.5 mg/ml
Injection volume:	1 µl
Detection:	ELSD, the nebulizer and evaporator temperatures 50°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)

Description

· HPLC Method for Analysis of Acetylcholine , Choline on Obelisc R Column by SIELC Technologies

Acetylcholine and choline are related compounds that play distinct roles in the body, particularly in the nervous system.

In summary, choline is a nutrient that the body uses to synthesize acetylcholine, among other important molecules. Acetylcholine, on the other hand, is a neurotransmitter responsible for transmitting signals in the nervous system. While choline is obtained from the diet or supplements, acetylcholine is a key mediator of nerve and muscle function in the body.

Acetylcholine and Choline can be retained, separated and analyzed using an Obelisc R mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and ammonium acetate as a buffer. Detection is achieved using ELSD

Method Parameters

Mobile Phase	MeCN/H2O – 60/40%
Buffer	Ammonium acetate pH 5.0 – 10 mM
Flow Rate	0.2 ml/min
Detection	ELSD, the nebulizer and evaporator temperatures 50°C,with a gas flow rate of 1.6 Standard Liters per Minute (SLM)
Samples	0.5 mg/ml
Injection volume	1 µl
LOD*	200 ppb
Class of Compounds	Quaternity amines
Analyzing Compounds	Acetylcholine,Choline

HPLC Column Used

Obelisc R, 2.1 x 100 mm, 5 µm, 100 A, dual ended

Order this column at hplc-shop.de →