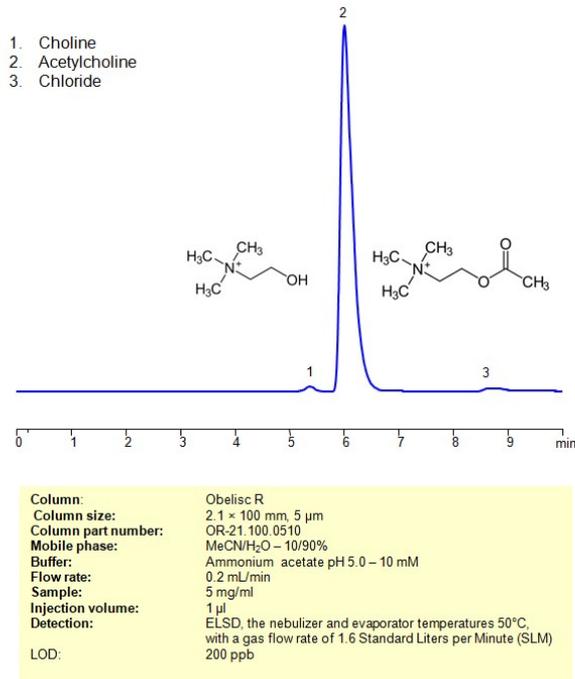


HPLC ELSD Method for Analysis of Acetylcholine on Obelisc R Column



Acetylcholine is a neurotransmitter, which is a chemical messenger that transmits signals across synapses, the gaps between nerve cells or between nerve cells and muscles. It plays a crucial role in the nervous system, both in the central nervous system (CNS) and the peripheral nervous system (PNS).

Here are key points about acetylcholine:

The balance of acetylcholine and other neurotransmitters is essential for proper nervous system function. Imbalances in acetylcholine levels have been implicated in various neurological disorders.

Acetylcholine can be retained 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

Column	Obelisc R, 2.1 x 100 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 10/90%
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)
Injection Volume	1 µl

Quelle: <https://sielc.com/hplc-method-for-analysis-acetylcholine>