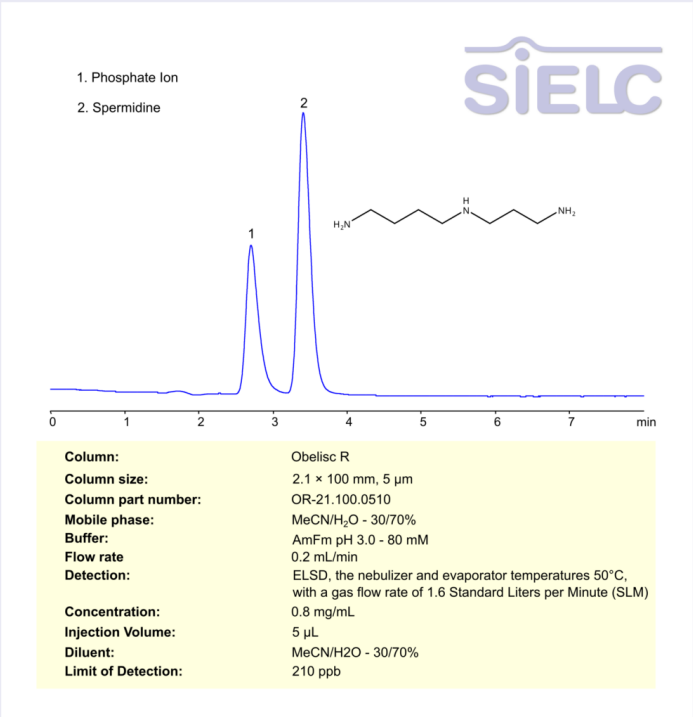
HPLC ELSD Method for Analysis Spermidine on Obelisc R Column



Column:	Obelisc R
Column size:	2.1 × 100 mm, 5 µm
Column part number:	OR-21.100.0510
Mobile phase:	MeCN/H_2O - 30/70%
Buffer:	AmFm pH 3.0 - 80 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)
Concentration:	0.8 mg/mL
Injection Volume:	5 µL
Diluent:	MeCN/H2O - 30/70%
Limit of Detection:	210 ppb

Spermidine is a polyamine compound that is found in all living cells. It is a biogenic amine and is involved in various cellular processes.

Research and Health Implications:

Spermidine 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 formate 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/H2O – 20/80%
Buffer	Ammonium formate pH 3.0 – 30 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	5 µl

Quelle: https://sielc.com/hplc-method-for-analysis-spermidine