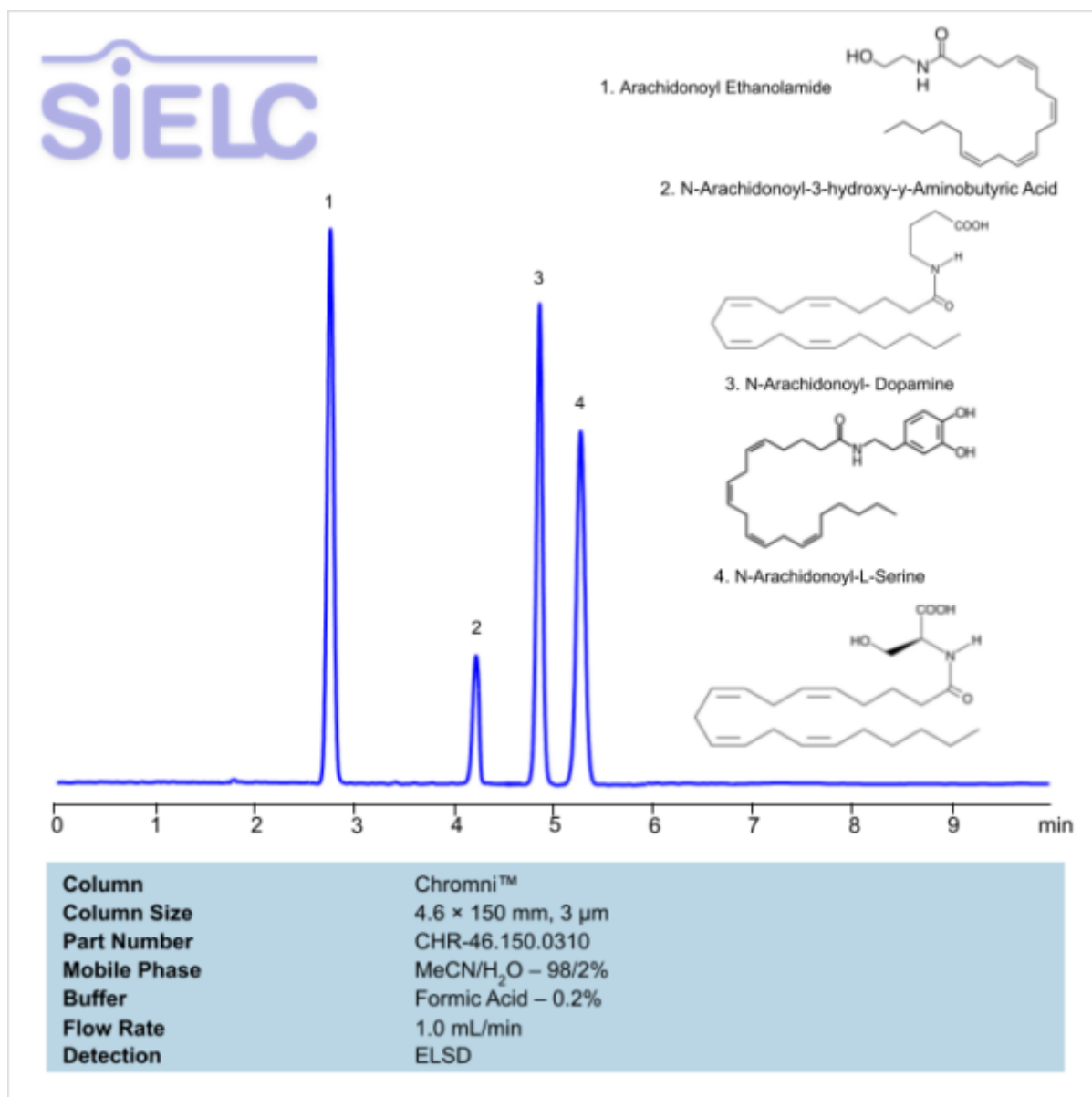


HPLC ELSD Method for Separation of Endocannabinoid-Related Lipids on Chromni Column

<https://sielc.com/hplc-elsd-of-endocannabinoids>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Arachidonoyl ethanolamide (AEA), N-Arachidonoyl-3-hydroxy-γ-Aminobutyric Acid, N-Arachidonoyl dopamine, N-Arachidonoyl-L-Serine.

Arachidonoyl ethanolamide, also denoted as AEA, is a bioactive lipid that has the chemical formula C₂₂H₃₇NO₂ and plays significant roles in various physiological and biochemical processes. AEA influences inflammatory and pain pathways due to being an endocannabinoid, meaning it binds to cannabinoid receptors as THC in cannabis does. You can find detailed UV spectra of AEA and information about its various lambda maxima by visiting the following link.

N-Arachidonoyl-3-hydroxy-γ-Aminobutyric Acid is an endogenous lipid messenger with the chemical formula C₂₄H₃₉NO₄. It occurs naturally in brains of mammals. Due to containing aminobutyric acid, it plays a role in regulating GABAergic pathways. As an endocannabinoid, it also binds to specific G-protein receptors. You can find detailed UV spectra of

N-Arachidonoyl-3-hydroxy- γ -Aminobutyric Acid and information about its various lambda maxima by visiting the following link

N-Arachidonoyl Dopamine , also written as NADA , is an endocannabinoid with the chemical formula $C_{22}H_{41}NO_3$. It acts as an agonist of the CB 1 receptor as well as the transient receptor potential V1. You can find detailed UV spectra of NADA and information about its various lambda maxima by visiting the following link.

N-Arachidonoyl-L-Serine , also written as ARA-S , is an a lipid with the chemical formula $C_{23}H_{37}NO_4$. Unlike classic endocannabinoids, it exhibits only a weak affinity for CB 1 , CB 2 , and TRPV-1. Instead, it works as an agonist for GPR55 receptor. You can find detailed UV spectra of ARA-S and information about its various lambda maxima by visiting the following link.

Arachidonoyl ethanolamide (AEA) , N-Arachidonoyl-3-hydroxy- γ -Aminobutyric Acid , N-Arachidonoyl dopamine , N-Arachidonoyl-L-Serine can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with an Ammonium Acetate buffer. Detection is performed using MS.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 98/2%
Buffer	Formic Acid – 0.2%
Flow Rate	1.0 mL/min
Detection	ELSD
Class of Compounds	Endocannabinoids
Analyzing Compounds	Arachidonoyl ethanolamide (AEA),N-Arachidonoyl-3-hydroxy- γ -Aminobutyric Acid,N-Arachidonoyl dopamine,N-Arachidonoyl-L-Serine

HPLC Column Used

Chromni, 4.6 x 150 mm, 3 μ m, 100 Å, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)