

APPLICATIONS

LC-MS/MS Analysis of Ethyl Glucuronide (EtG) and Ethyl Sulfate (EtS) in Urine using Luna[®] Omega 5 μm Polar C18 HPLC Column

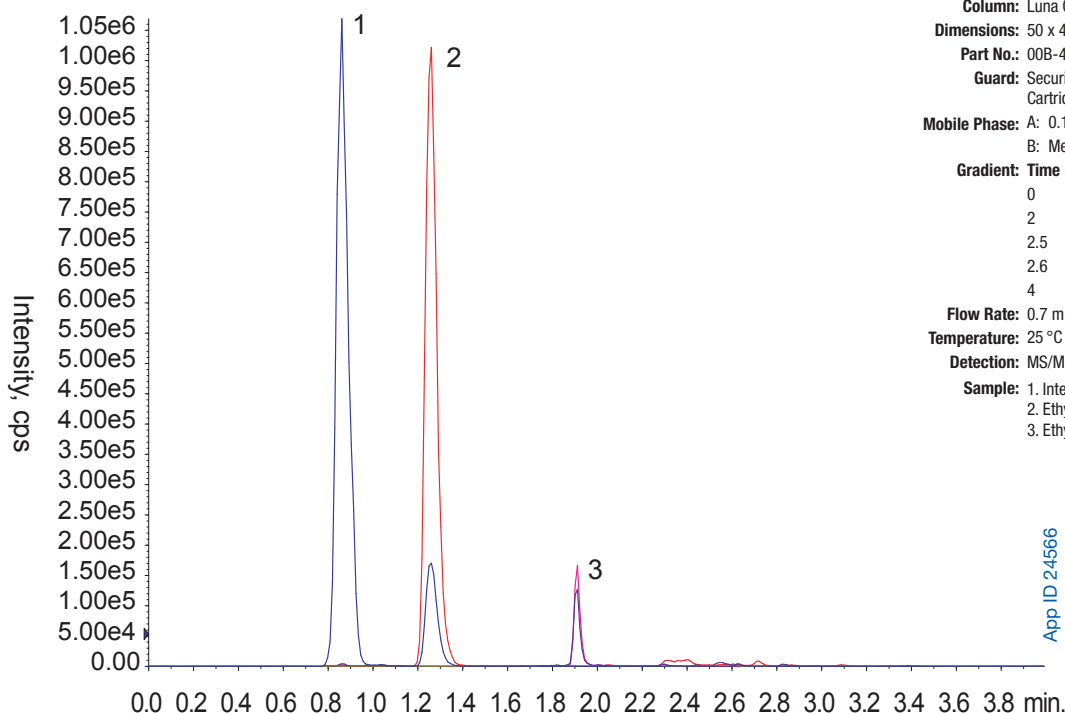
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Overview

Ethyl glucuronide and ethyl sulfate are metabolites of ethanol (alcohol) that may be present in urine after the ingestion of or exposure to substances (drinks, foods, medication or other products) containing ethyl alcohol ethanol. The presence of EtG and EtS in urine may be used to detect recent ethanol ingestion or exposure, even after ethanol is no longer measurable. This application illustrates a rapid separation of ethyl glucuronide and ethyl sulfate metabolites using a Luna Omega 5 μm Polar C18 HPLC column. Luna Omega Polar C18 provides excellent separation between EtG and EtS, along with valuable separation from a urine interference peak and where other matrix suppression is common.



Representative Chromatogram of EtG and EtS in Urine



LC-MS/MS Methodology

Column: Luna Omega 5 μm Polar C18
Dimensions: 50 x 4.6 mm
Part No.: 00B-4754-E0
Guard: SecurityGuard[™]
 Cartridge: AJ0-7601
Mobile Phase: A: 0.1 % Formic acid in Water
 B: Methanol
Gradient:

Time (min)	% B
0	2
2	95
2.5	95
2.6	2
4	2

Flow Rate: 0.7 mL/min
Temperature: 25 °C
Detection: MS/MS (Triple Quad 4500)
Sample: 1. Interference
 2. Ethyl Sulfate (EtS)
 3. Ethyl Glucuronide (EtG)

App ID 24566

Revision: 0

PHEN-RUO-00006



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Luna® Omega Ordering Information

5 µm Analytical Columns (mm)					SecurityGuard™ Cartridges (mm)
Phases	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	4 x 2.0*
Polar C18	00B-4754-E0	00D-4754-E0	00F-4754-E0	00G-4754-E0	AJ0-7601
				for ID:	3.1-8.0 mm

* SecurityGuard Analytical Cartridges require holder, Part No.: KJ0-4282

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If Luna analytical columns do not provide at least an equivalent or better separation as compared to a competing column of the same particle size, similar phase and dimensions, return the column with comparative data within 45 days for a FULL REFUND.

Terms and Conditions

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