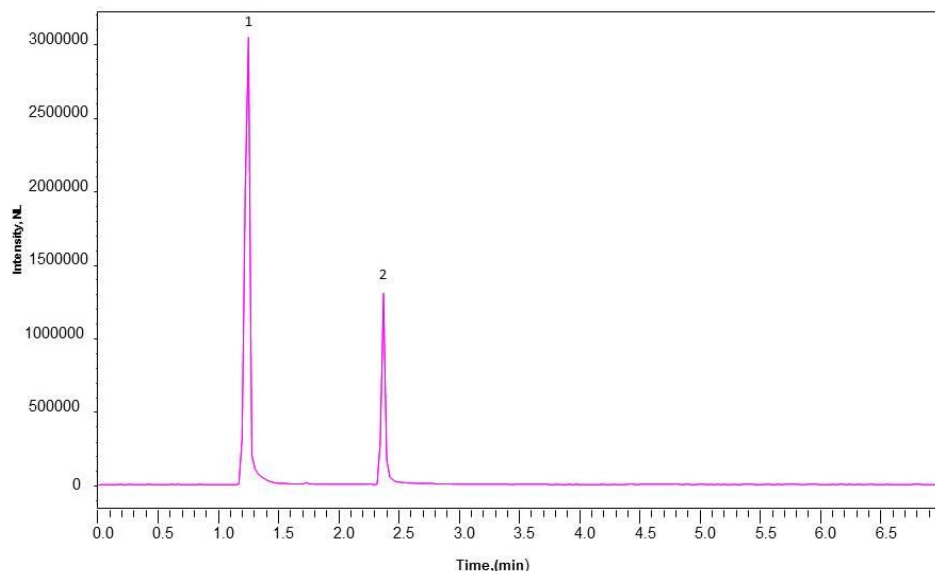




UHPLC/MS Analysis of Ethanol Metabolites in Urine on Ascentis® Express OH5



Peak Number	Compound	Concentration $\mu\text{g/mL}$
1	Ethyl sulfate	5
2	Ethyl glucuronide	5

Conditions:

column: Ascentis® Express OH5, 10 cm x 2.1 mm I.D., 2 μm

mobile phase: [A] 5 mM ammonium formate (0.1% (v/v) formic acid) in 95:5 acetonitrile:water; [B] 5 mM ammonium formate (0.1% (v/v) formic acid) in 80:20 acetonitrile:water

gradient: 0% B to 100% B in 1 min; hold at 100% B for 4 min; 100% B to 0% B in 0.1 min; hold at 0% B for 2 min.

flow rate: 0.4 mL/min

column temp.: 40 °C

detector: MSD, ESI(-)

injection: 2 μL

sample: Ethanol metabolites, varied concentration, 5 mM ammonium formate (0.1% (v/v) formic acid) in 95:5 acetonitrile:water

Description:

The 2 μm Ascentis® Express OH5 is ideal for the analysis of ethanol metabolites ethyl glucuronide (EtG) and ethyl sulfate (EtS). These metabolites are found in urine after alcohol consumption and are therefore used as biomarkers to determine if someone has ingested alcohol. EtG can be detected up to 80 hours after ingestion, making it a particularly useful and effective indicator.

Materials:

Product Part Number	Description
50959-U	Ascentis® Express OH5, 10 cm x 2.1 mm I.D., 2 μm
S-020	Surine™ Negative Urine Control
70221	Ammonium formate salt
900667	Acetonitrile for UHPLC/MS
900682	Water for UHPLC/MS

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Analytical Products



Product Part Number	Description
E-064-1ML	Ethyl sulfate sodium salt, 1.0 mg/mL, methanol
E-015-1ML	Ethyl- β -D-glucuronide, 1.0 mg/mL, methanol

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