Alcohol Biomarkers by UHPLC-MS/MS

ACE®
Ultra-inert
UHPLC & HPLC Columns

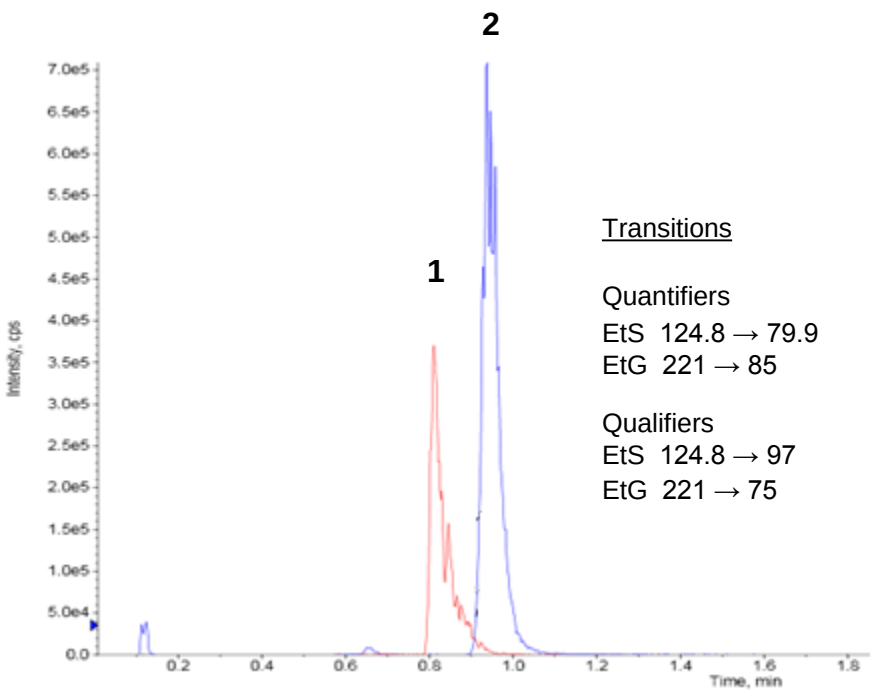
Application #**AN1910**

Conditions

Column:	ACE Excel 1.7 C18
Dimensions:	100 x 2.1 mm
Part Number:	EXL-171-1002U
Mobile Phase:	A: 1 mM ammonium fluoride B: MeCN

Time (mins)	%B
0.0	0
0.5	20
1.5	20
2.0	100
4.0	100
4.5	0

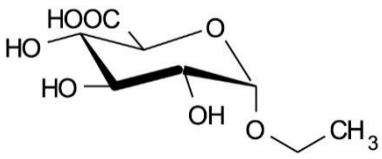
Flow Rate:	0.4 mL/min
Injection:	1 µL
Temperature:	40 °C
Detection:	AB SCIEX triple quad 5500 Negative ESI MRM Source temperature: 750 °C IonSpray voltage: -4500 V



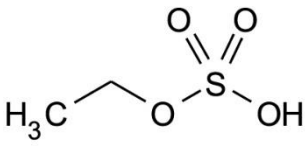
Transitions

Quantifiers
EtS 124.8 → 79.9
EtG 221 → 85

Qualifiers
EtS 124.8 → 97
EtG 221 → 75



1. Ethyl glucuronide (EtG)



2. Ethyl sulfate (EtS)

Fluoride counter-ion thought to enhance negative ESI response

Detection limit ~ 1 ng/mL in oral fluid

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