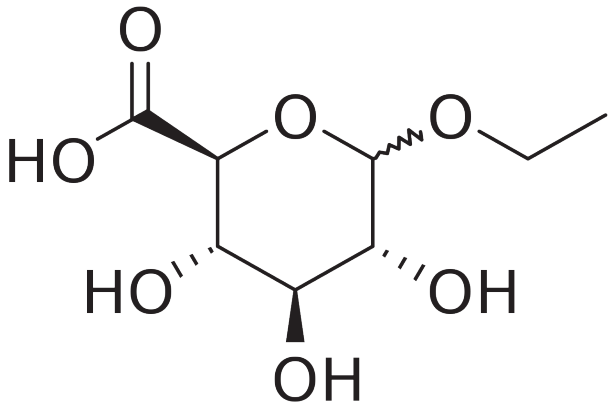
Ethylglucuronide (ETG) and Ethyl Sulfate (ETS) In Hair for LC-MS/MS Confirmations Using: 200 mg Clean Screen® Extraction Column



UCT Part Numbers

CSETG203
Clean Screen ® ETG 200 mg in a 3 mL SPE cartridge

Procedure:

1. Prepare Sample

a) Into a clean glass tube add approx. 50-100 mg of decontaminated hair.
b) Add 1 mL of DI H_2O, add internal standards*
c) Vortex mix
d) Incubate at 40 ^{0}C for 12 hours.
e) Centrifuge as appropriate

2. Condition Clean Screen® Extraction Column

a) 1 x 3 mL CH_3OH containing 1% Formic acid
b) 1 x 3 mL DI H_2O containing 1% Formic acid

Note: aspirate at < 3 inches Hg to prevent sorbent drying out

3. Apply Sample

a) Load sample at 1-2 mL / minute

4. Wash Column

a) 1 x 3 mL DI H_2O
b) Dry column (10 minutes at > 10 inches Hg)

5. Elute ETG/ETS

a) 2 x 3 mL CH_3OH containing 1% Formic acid
b) Collect eluate at 1-2 mL /minute

6. Evaporation

a) Evaporate eluate under a gentle stream of nitrogen < 40 °C.
b) Dissolve the residue in 100 µL of mobile phase. Inject 20 µL

Instrument Conditions	
Column	150 x 2.1 mm (4 µm) Diamond Hydride (MicroSolv)
Flowrate	0.4 mL/minute
Column Temp.	50 °C
Detector	API 4000 QTRAP MS/MS

Mobile Phase		
Time (min)	**% Acetonitrile**	**0.1 % Formic Acid**
0	95	5
5	95	5

Compound	(-) MRM Transition	Lipomed #
ETG	221.0/75.0	EGL-332
*ETG-D5	226.1/74.9	EGL-780
ETS	125.1/76.9	ETS-972
*ETS-D5	130.0/97.8	ETS-979

ENVIRO

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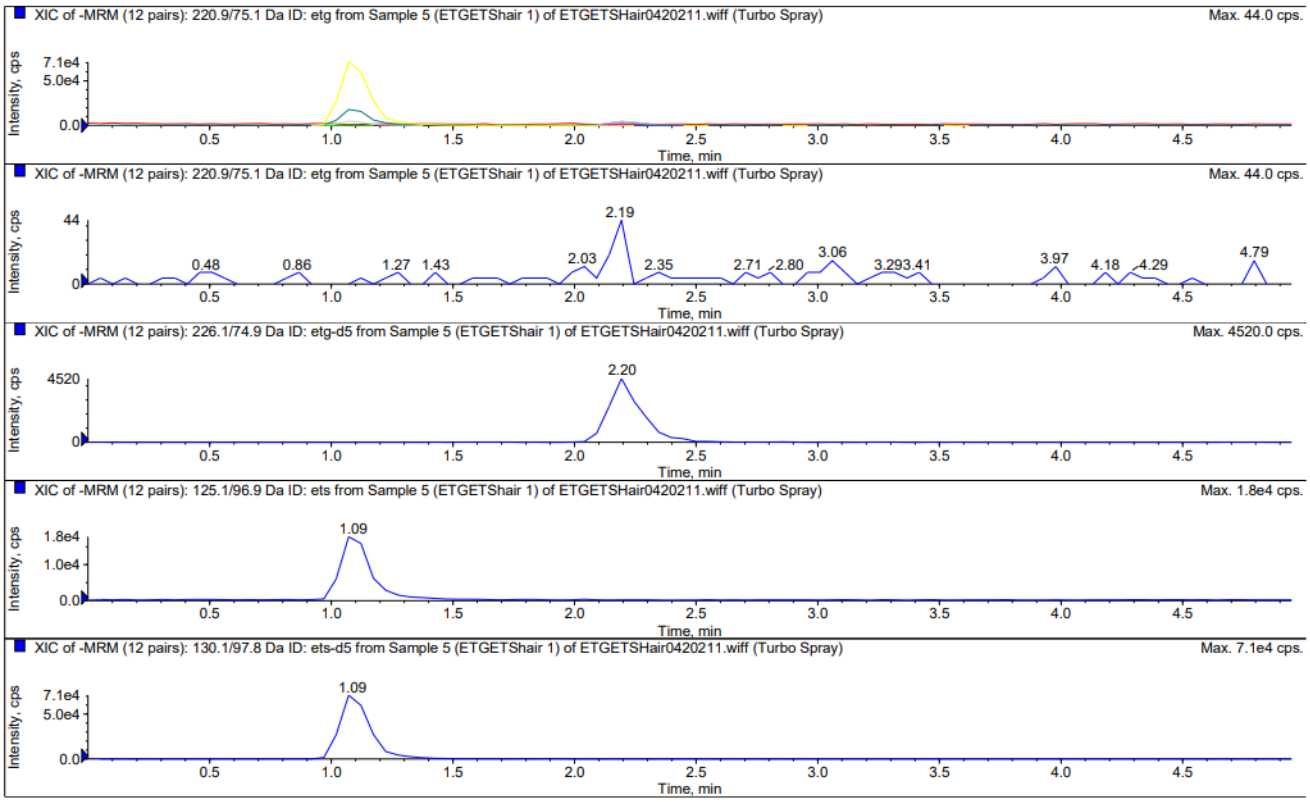
UCT

Chromatogram of ETG/ETS extracted from Decontaminated Hair



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