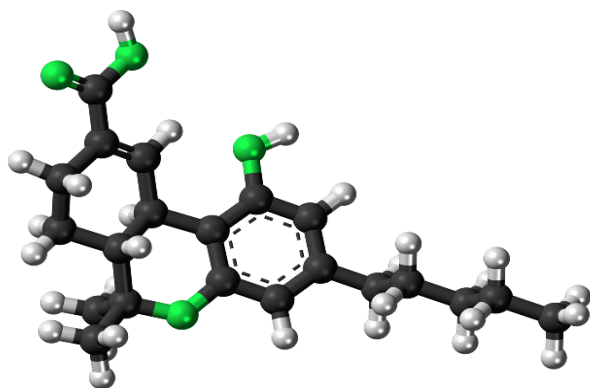


Extraction of THC-COOH In Hair



UCT Part Numbers

CSTHC206
Clean Screen® THC
200 mg, 6 mL

Procedure:

1. Prepare Sample

- Into a clean glass tube add approx 100 mg of decontaminated hair
- Add 1 mL of DI H₂O, add internal standard* and 100 µL of 10 M NaOH
- Digest at 70°C for 12 hours
- Cool and adjust to pH 3

2. Condition Column

- 1 x 3 mL CH₃OH
- 1 x 3 mL D.I. H₂O
- 1 x 1 mL 100 mm HCl

Note: Aspirate at < 3 inches Hg to prevent sorbent drying

3. Apply Sample

- Load sample at 1 to 2 mL/minute

4. Wash Column

- 1 x 3 mL DI H₂O
- 1 x 3 mL CH₃CN /HCl (30:70)
- Dry column (5 minutes at > 10 inches Hg)

5. Elute THC-COOH

- 1 x 3 mL Hexanes/Ethyl acetate/Acetic Acid (49:49: 2)
- Collect eluate at 1-2 mL / minute

6. Evaporation

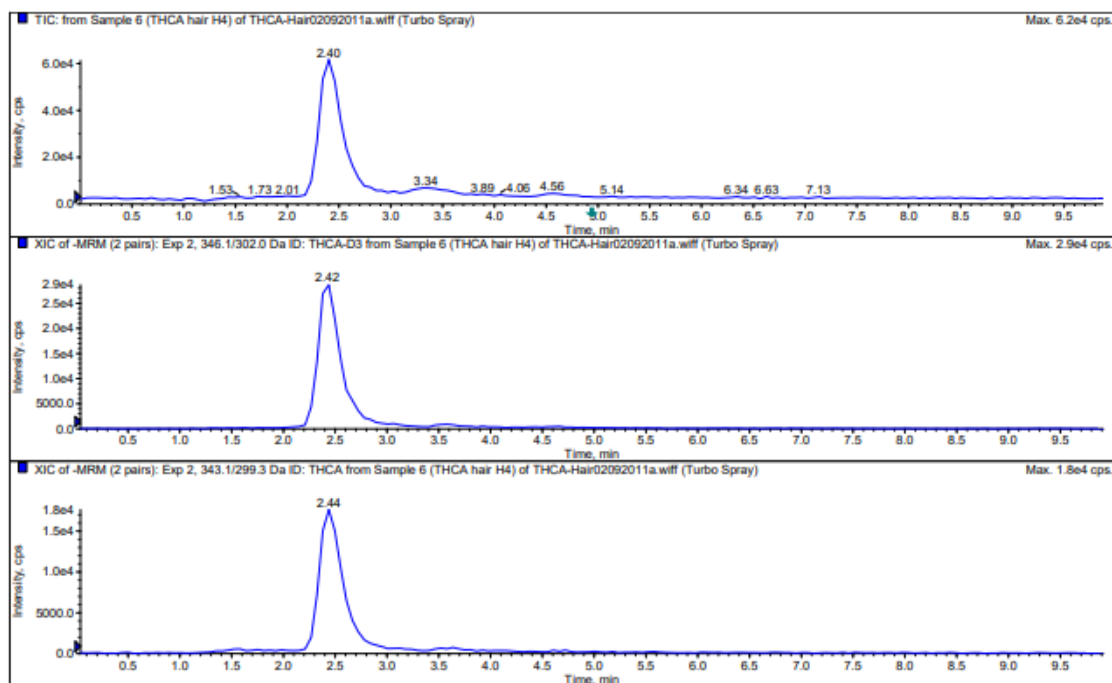
- Evaporate eluate under a gentle stream of nitrogen < 40°C
- Dissolve the residue in 100 µL of mobile phase.
Inject 10 µL



Instrument Conditions	
Column	50 x 2.1 (3 μ L) SELECTRA® Phenyl
Flowrate	0.3 mL / minute
Column Temperature	40°C
Detector	API 4000 QTRAP MS/MS

Mobile Phase		
Time / min	% Acetonitrile	% 0.1 % Formic Acid
0	60	40
10	60	40
Compound		(-) MRM Transition
THC-COOH		343.1/299.3
*THC-COOH-d3		346.1/302.1

Chromatogram of THC-COOH extracted from decontaminated hair



Recovery: > 95% (N=20)

DCN-113140-216

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