# THC-COOH IN URINE CLEAN SCREEN FASt ® THC COLUMN


## UCT Featured Products

**SLDA50ID21-5UM**
Selectra® DA HPLC Column,
50 x 2.1 mm, 5 µm

**CSFASTH203**
CLEAN SCREEN FASt® THC
200 mg, 3 mL Tube

## Procedure:

### 1) Prepare Sample-Base Hydrolysis of Glucuronides

To 2 mL of urine add internal standard and 50 µL of 10 M NaOH.
Mix/vortex.
Hydrolyze for 15 minutes at 60-70 °C.
Cool before proceeding.
Adjust sample pH to 7.0 with 50 µL of 1:1 $H_2O$: Glacial Acetic Acid.
Add 200 µL pH 7.0 100mM Phosphate Buffer (pH should be ~7.0)

### 2) Load Sample and Sample Dilute Ratio

Sample Dilution Ratio: Sample Volume* : Diluent** Volume
**NOTE:** *If sample is hydrolyzed add appropriate aliquot volume after hydrolysis is complete.

| Dilution Ratio | Urine | Diluent** |
|---|---|---|
| 1:1 | 500 µL | 500 µL |
| 1:4 | 200 µL | 800 µL |
| 1:9 | 100 µL | 900 µL |

** Diluent is 50:50 (Acetonitrile: D.I. $H_2O$)

Sample and diluents are added in an appropriately labeled tube.

Add appropriate volume internal standard(s). It is recommended to use an internal standard volume of no more than 200 µL.

### 3) Extraction & Collection

Set up extraction manifold with FASt cartridges and au to-sampler collection vials.

Pour sample into FAST cartridge and elute sample directly into auto-sampler vials.

### 4) Analysis

Cap vials and put directly onto LC/MS for analysis.



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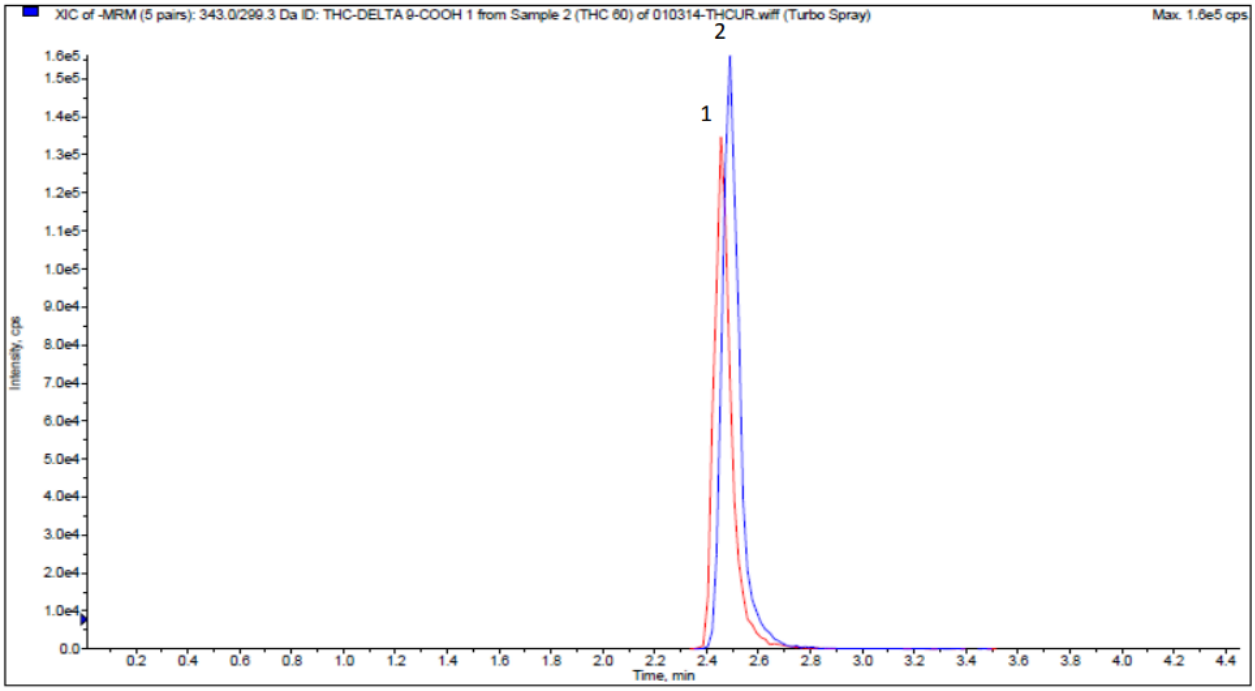
## INSTRUMENT CONDITIONS (LC-MS/MS):




| Analyte | MRM Transitions | | Relative Retention Time (min) |
|---|---|---|---|
| | Q1 | Q3 | |
| THC-DELTA 9-COOH $D_9$ | 352 | 308 | 2.44 |
| THC-DELTA 9-COOH | 343 | 299 | 2.49 |

| LC-MS/MS Parameters | |
|---|---|
| Mobile Phase A | 0.1% Formic Acid in D.I. $H_2O$ |
| Mobile Phase B | 0.1% Formic Acid in Methanol |
| Flow Rate | 0.5 mL/minute |
| Instrument | API 3200 Qtrap MS/MS with Shimadzu Prominence UFLC |
| LC Column | Selectra® DA HPLC Column 50 x 2.1 mm 5 µm |
| Polarity | Negative |
| Injection Volume | 20 µL |

| Gradient | | |
|---|---|---|
| Time | %A | %B |
| 0.00 | 60 | 40 |
| 2.00 | 30 | 70 |
| 2.50 | 10 | 90 |
| 2.51 | 60 | 40 |
| 4.00 | STOP | STOP |

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