



LSD AND METABOLITES IN BLOOD, PLASMA/SERUM, AND URINE USING: 200 mg CLEAN SCREEN[®] EXTRACTION COLUMN

Part #: CSDAU020

LC-MSMS

1. PREPARE SAMPLE:

To 1 mL of 100 mM phosphate buffer (pH 6) add internal standards.*

Add 1 mL of whole blood, serum/ plasma, urine. Add 2 mL of 100 mM phosphate buffer (pH 6). Vortex and centrifuge as appropriate.

2. CONDITION COLUMN:

1 x 3 mL CH₃OH

1 x 3 mL D.I. H₂O

1 x 1 mL 100 mM phosphate buffer (pH 6).

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

3. APPLY SAMPLE:

Load sample at 1-2 mL / minute.

4. WASH COLUMN:

1 x 3 mL DI H₂O

1 x 3 mL 100 mM acetic acid.

1 x 3 mL CH₃OH

Dry column (5 minutes at > 10 inches Hg).

5. ELUTE LSD AND METABOLITES

1 x 3 mL ethyl acetate; acetonitrile: ammonia (78: 20: 2 v/v)

Or

1 x 3 mL CH₂Cl₂/ IPA/ ammonia (78:20:2 v/v)

Collect eluate at 1-2 mL /minute.

6. EVAPORATION:

Evaporate eluates to dryness under a gentle stream of nitrogen.

7. RECONSTITUTE sample in 50 µL of CH₃OH.

Inject 5 µL.

INSTRUMENT CONDITIONS:

Column: 100 x 2.1 mm (3 µm) Selectra® Phenyl (UCT, LLC)

Mobile Phase:

<u>Time%</u>	<u>Acetonitrile%</u>	<u>0.1% Formic acid</u>
0	30	70
3.0	90	10
3.1	30	70
5.0	30	70

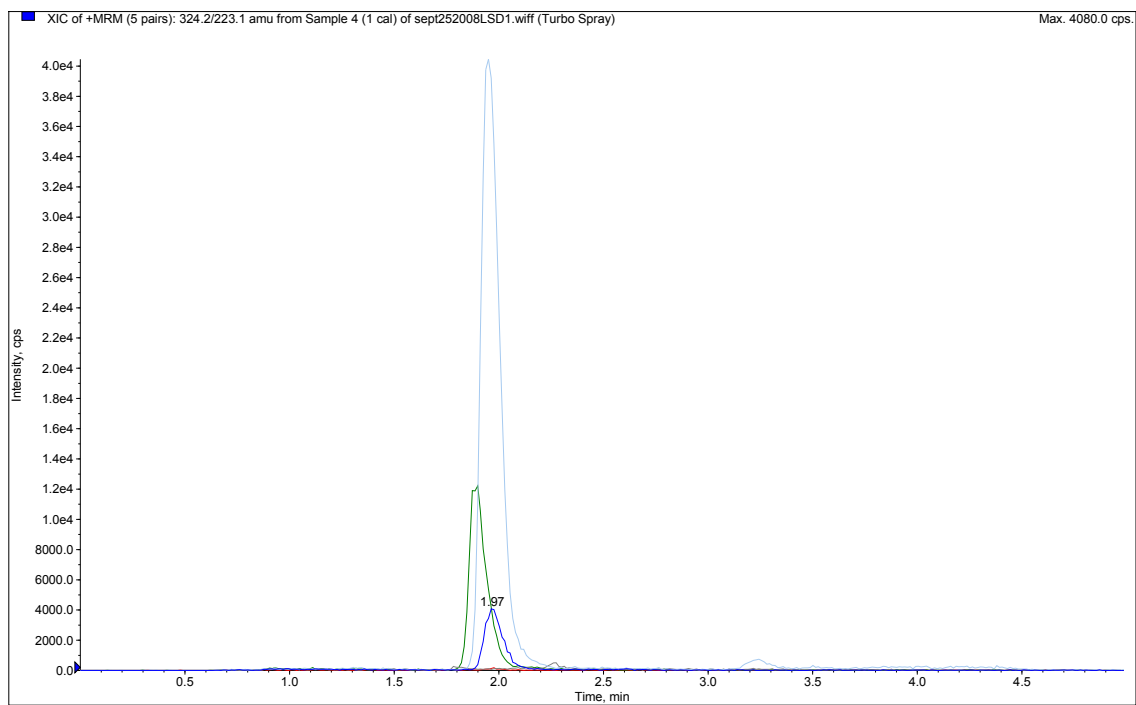
Flowrate: 0.5 mL/ minute

Column Temperature: ambient

Detector: API 3200 QTRAP MS/MS

<u>Compound</u>	<u>MRM Transition</u>	<u>Cerilliant #</u>
LSD	324.2/ 223.1	-005
Iso-LSD	324.2/281 (223.1)	I-010
Nor-LSD	310.2/209.1	L-017
OH-LSD	356.2/338.1	O-013
*LSD-D3	327.2/226.1	L-002

CHROMATOGRAM OF LSD AND METABOLITES



Recovery: > 90% (N=10)

LOD: 0.1 ng/ mL