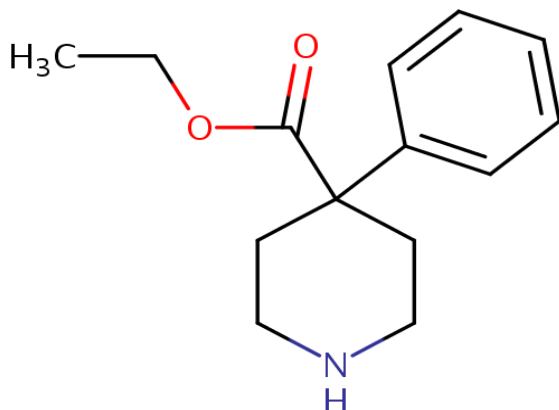


Meperidine and Normeperidine in Blood, Plasma/Serum, and Urine Using: 200 mg CLEAN SCREEN® DAU



UCT Part Numbers

ZSDAU020
Clean Screen® DAU
200 mg, 10mL Column

Procedure:

1. Prepare Sample

- To 1 mL of 100 mM phosphate buffer (pH 6) add internal standard.*
- 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 Meperidine/Normeperidine

- 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:	Silica Hydride (150 x2.0 4μm) MicroSolv Corp.	
Mobile Phase		
Time	% Acetonitrile	0.1% Formic acid
0	90	10
5	30	70
6	90	10
10	90	10
Flowrate:	0.35 mL/ minute	
Column Temp:	Ambient	
Detector:	API 2000 MS/MS	

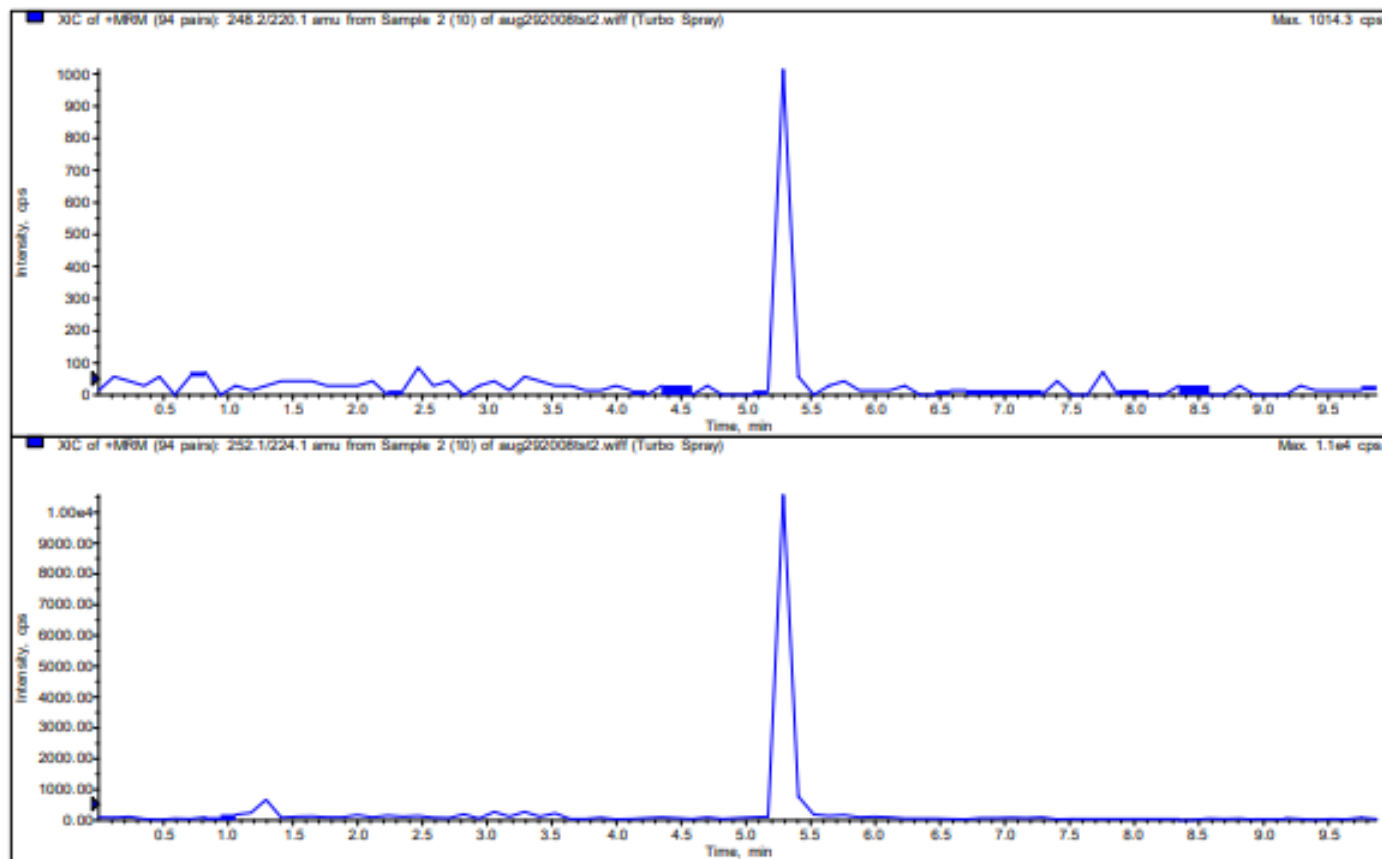
Compound	MRM Transition	Cerilliant #
Meperidine	248.2/ 220.0	M-035
*Meperidine-D4	252.2/224.1	M-036
Normeperidine	234.1/160.0	N-017
*Normeperidine-D4	238.1/164.0	N-021



Chromatogram Showing:

Meperidine

Meperidine-D4

**Recovery:** > 90% (n=10)**LOD:** 10 ng/mL

DCN-905060-161

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