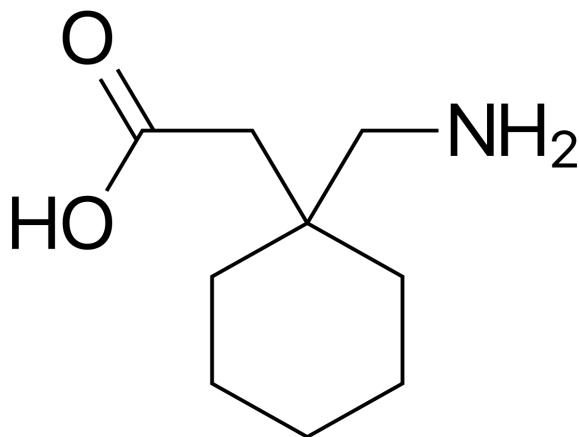


Gabapentin In Whole Blood, Serum/ Plasma LC-MS/MS Confirmations Using: 200 mg CSDAU Extraction Column



UCT Part Numbers

CSDAU206
Clean Screen® DAU
200 mg, 6 mL

Procedure:

1. Prepare Sample

- To 0.2-0.5 mL of sample add 1 mL of acetone (dropwise) whilst vortexing. Add internal standard*
- Vortex mix and centrifuge as appropriate.
- Transfer organic phase to clean tube.
- Evaporate to dryness.
- Add 3 mL of 100 mM HCl.
- Vortex mix 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 HCl.

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 D.I. H₂O.
- 1 x 3 mL ethyl acetate.
- 1 x 3 mL hexane.
- Dry column (10 minutes at > 10 inches Hg).

5. Elute Gabapentin

- 1 x 3 mL CH₃OH containing 2% NH₄OH.
- Collect eluate at 1-2 mL /minute.

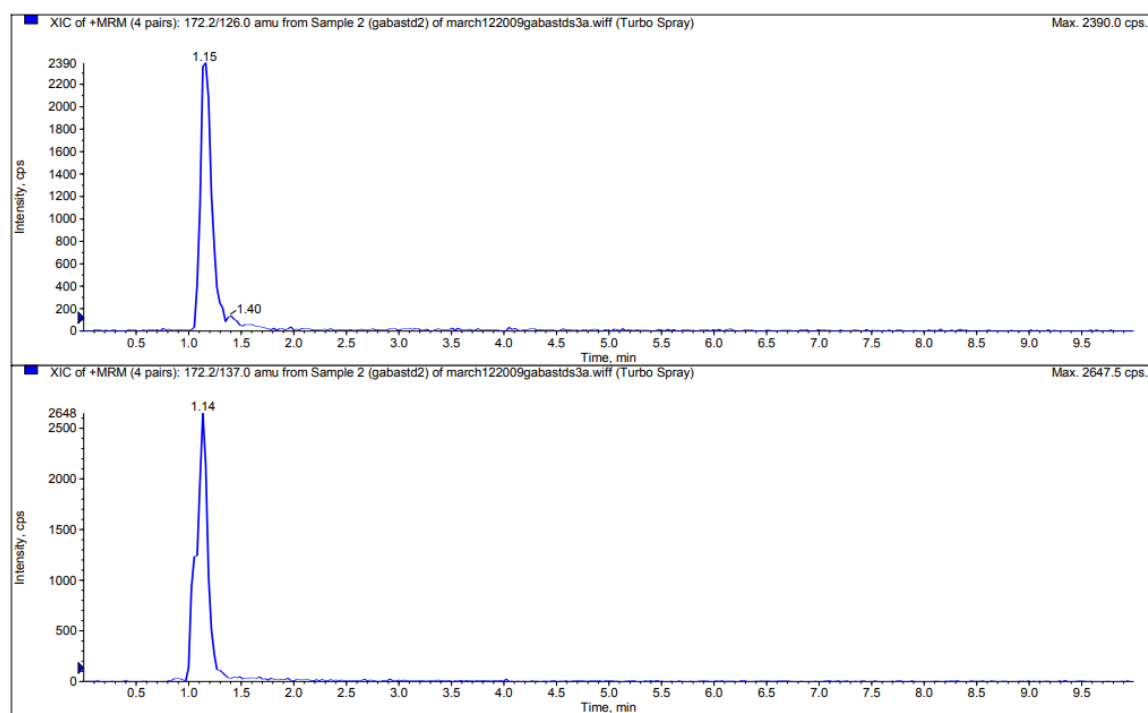
6. Evaporation

- Evaporate eluates under a gentle stream of nitrogen < 40°.
- Dissolve residue in 100 µL CH₃OH.



Instrument Conditions		
Column	50 x 2.1 mm (3 μm) Selectra® Phenyl (UCT, LLC)	
Flow Rate	0.2 mL/ minute	
Injection Volume	5 μL	
Column Temperature	ambient	
Detector	API 2000 MS/MS.	
Gradient		
Time (min)	Acetonitrile	0.1% Formic Acid
0	10	90
5	90	10
5.5	10	90
10	10	90

Chromatogram of Gabapentin (top) and Aminocyclohexanepropionic acid (lower)



Compound	MRM Transition
Gabapentin	172.2/ 137
*Gabapentin-D10	182.2/147
* Aminocyclohexane-propionic acid	172.2/ 126

Recovery (approx 70%)

LOD = 50 ng/mL

DCN-900330-145

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