Quetiapine In Blood, Plasma/Serum, Urine And Tissue Using: 200 mg Clean Screen® Extraction Column

UCT Part Numbers

ZSDAU020

Clean Screen® DAU 10 mL, 200 mg sorbent

Procedure:

1. Prepare Sample

- a) To 1 mL of 100 mM phosphate buffer (pH= 6) add internal standard.* Add 1 mL blood, plasma/serum, urine or 1 g (1:4) tissue homogenate.
- b) Add 2 mL of 100 mM phosphate buffer (pH= 6).
- c) Sample pH should be 6.0 ± 0.5 .
- d) Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.
- e) Centrifuge as appropriate.

2. Condition Clean Screen® Extraction Column

- a) 1 x 3 mL CH₃OH.
- b) 1 x 3 mL D.I. H₂O.
- c) 1 x 3 mL 100 mM phosphate buffer (pH=6).

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

3. Apply Sample

a) Load sample at 1-2 mL / minute.

4. Wash Column

- a) 1 x 3 mL 100 mM phosphate buffer (pH 6).
- b) 1 x 3 mL 1.0 M acetic acid.
- c) 1 x 3 mL CH₃OH.
- d) Dry column (5 minutes at > 10 inches Hg).
- e) 1 x 3 mL of hexane.
- f) Dry column (5 minutes at > 10 inches Hg).

5. Elute Quetiapine

- a) 1 x 3 mL ethyl acetate; acetonitrile: ammonia (78: 20: 2 v/v).
- b) Collect eluate at 1-2 mL/minute.

Note: Prepare elution solvent daily.

6. Evaporation

a) Evaporate eluates under a gentle stream of nitrogen
∠ 40°C

7. Reconstitute

- a) Reconsititue sample in 100 μ L 0.1% trifluoroacetic acid (aq).
- b) Inject 50 μL.

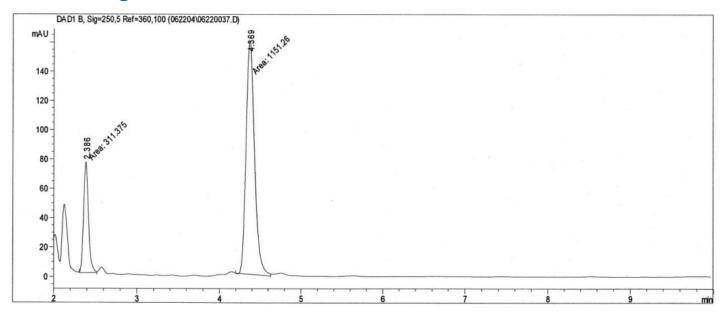






INSTRUMENT CONDITIONS	
Column	C18 150 x 4.6 mm (3 µm) Zorbax (Agilent Technologies)
Mobile Phase	0.1% Trifluoroacetic acid (25: 75)
Flowrate	1 mL / min
Column Temperature	35° C
Detector	Diode Array (250 nm)

Chromatogram:



Cerilliant Part # Q001

Quetiapine *Quinidine

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