Sertraline and Desmethylsertraline In Blood, Plasma/Serum For HPLC Analysis Using: 200 mg Clean Screen[®] Extraction Column

UCT Part Numbers

ZSDAU020

Clean Screen® DAU 10 mL, 200 mg sorbent Without Tips ZCDAU020

Clean Screen® DAU 10 mL, 200 mg sorbent With CLEAN-THRU® Tips

Procedure:

1. Prepare Sample

- a) To 4 mL D.I. H_2O add 2 mL of 100 mM phosphate buffer (pH= 6.0). To this add internal standard*
- b) Add 1 mL of blood, plasma/serum or urine. Mix/vortex.
- c) Centrifuge for 10 minutes at 2000 rpm and discard pellet.
- d) Sample pH should be 6.0 ± 0.5 .
- e) Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

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 at 1 mL/minute.

4. Wash Column

- a) 1 x 3 mL D.I. H₂O.
- b) 1 x 1 mL 100 mM acetic acid.
- c) 1 x 3 mL CH₃OH.
- d) Dry column (5 minutes at > 10 inches Hg).

5. Elute

a) 1 x 3 mL CH₂Cl₂/IPA/NH₄OH (78:20:2); Collect eluate at 1 mL/minute.

Note: Prepare elution solvent fresh daily. Add IPA/NH $_4$ OH, mix, then add CH $_2$ Cl $_2$

6. Dry Eluate

a) Evaporate to dryness at < 40°C.

7. Quantitate

- a) Reconstitute with 200 μ L acetonitrile :D.I. H_2O (1:3).
- b) Mix/vortex vigorously for 30 seconds.
- c) Inject 100 μL onto chromatograph at wavelength
- d) Mobile phase = 0.25 M potassium phosphate (pH 2.7).
- e) Containing 30% CH₃CN.
- f) Flow rate = 2 mL/minute.







HPLC System

Isocratic HPLC using a Pump thru a C8 HPLC Column (LC-8 or equivalent HPLC Column) 15 cm x 4.6 mm ID

Coupled to a UV detector set at 235 nm.

Compound	Cerillant #
Sertraline	S-006
**Desmethylsertraline	N-049
** Norsertraline= Desmethylsertraline	

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