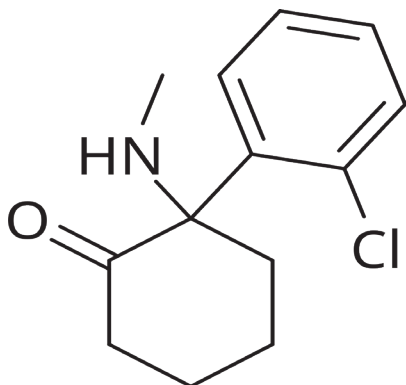


Ketamine In Blood, Plasma/Serum and Urine For GC Or GC/MS Confirmations Using: 200 mg Clean Screen® Extraction Column



UCT Part Numbers

ZSDAU020
Clean Screen® DAU
10 mL, 200 mg sorbent
Without Tips

Or

ZCDAU020
Clean Screen® DAU
10 mL, 200 mg sorbent
With CLEAN-THRU® Tips

Procedure:

1. Prepare Sample

- To 1 mL of 100 mM phosphate buffer (pH= 6.0) add internal standard*. Add 1-2 mL of blood, plasma/serum or urine.
- Mix/ vortex. Add 2 mL 100 mM phosphate buffer (pH= 6.0).
- Sample pH should be 6.0 ± 0.5.
- Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.
- Centrifuge as appropriate. 1 mL of 100 mM phosphate buffer (pH= 6.0).

2. Condition Clean Screen® Extraction Column

- 1 x 3 mL CH₃OH.
- 1 x 3 mL D.I. H₂O.
- 1 x 1 mL 100 mM phosphate buffer (pH 6.0).

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

3. Apply Sample

- Load at 1 mL/minute.

4. Wash Column

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

5. Elute Ketamine

- 1 x 3 mL Dichloromethane/Isopropanol/Ammonium Hydroxide (78:20:2).
 - Collect eluants at 1-2 mL/min using minimal vacuum.
- Note:** Make the elution solvent fresh daily.
- Add IPA/NH₄OH, mix then add CH₂Cl₂ (pH 11-12).

6. Dry Eluate

- Evaporate to dryness at < 40 °C.
- Reconstitute with 100 µL ethyl acetate.

7. Quantitate

- Inject 1 to 2 µL onto gas chromatograph.
- For MSD monitor the following ions:

Analyte	Primary Ion***	Secondary	Tertiary	Cerilliant #
Ketamine-D ₄ *	184	213	156	K-003
Ketamine	180	209	152	K-002

* Suggested internal standard for GC/MS: D₄-Ketamine

*** Quantitation ion

SOURCE - UCT Internal Publication



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