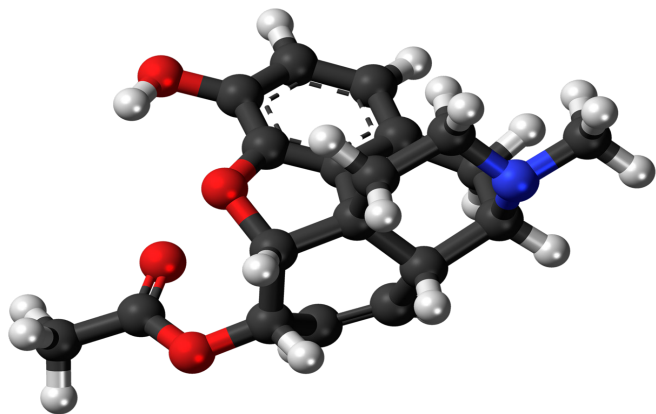


# 6-Acetylmorphine (6MAM) In Urine/Vitreous Humor GC/MS Confirmations Using: 200 mg Clean Screen® Extraction Column



## 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 2 mL of 100 mM phosphate buffer (pH= 6.0), add internal standard\* and Mix/vortex.
- Add 4 mL of sample
- Centrifuge for 10 minutes at 2000 rpm and discard pellet.
- Sample pH should be  $6.0 \pm 0.5$ .
- Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

### 2. Condition Clean Screen® Extraction Column

- 1 x 3 mL CH<sub>3</sub>OH.
  - 1 x 3 mL D.I. H<sub>2</sub>O.
  - 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. H<sub>2</sub>O.
- 1 x 2 mL 100 mM acetate buffer (pH 4.5).
- 1 x 3 mL CH<sub>3</sub>OH.
- Dry column (10 minutes at >10 inches Hg).

### 5. Elute 6-AM

- 1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/IPA/NH<sub>4</sub>OH (78:20:2);
  - Collect eluate at 1 to 2 mL/minute.
- Note:** Prepare elution solvent daily. Add IPA/NH<sub>4</sub>OH, mix, then add CH<sub>2</sub>Cl<sub>2</sub> (pH 11-12).

### 6. Dry Eluate

- Evaporate to dryness at < 40°C.

### 7. Derivatize

- Add 50 µL ethyl acetate. Vortex mix and add 50 µL BSTFA (with 1% TMCS)\*\*\*.
- Overlay with N<sub>2</sub> and cap. Mix/vortex.
- React 45 minutes at 70°C. Remove from heat source to cool.

**Note:** Do not evaporate BSTFA solution.

### 8. Quantitate

- Inject 1 to 2 µL onto chromatograph.
- Monitor the following ions (GC/MS):



Compound	Primary Ion****	Secondary	Tertiary	Cerilliant #
*D <sub>6</sub> -6-AM-TMS*	405	406	343	A-026
6-AM-TMS	399	400	340	A-009

\* Suggested internal standard for GC/MS:

\*\*\* Part # SBSTFA-1-1,10,25,100

\*\*\*\* Quantitation ion

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