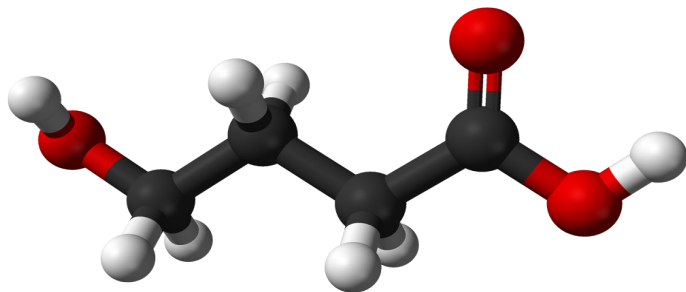


# A Solid-Phase Method For Gamma-Hydroxybutyrate (GHB) In Urine Without Conversion To Gamma-Butyrolactone (GBL)



## UCT Part Numbers

**ZSGHB020**  
Clean Screen® GHB  
200 mg, 10 mL

**SBSTFA-1-1**  
Selectra-Sil BSTFA  
with 1% TMCS 1g vial

## Procedure:

### 1. Prepare Sample

- To 200  $\mu$ L of urine add internal standard and 100  $\mu$ L of 100 mM phosphate buffer (pH 6.0). Mix/vortex

### 2. Condition Clean Screen® GHB Extraction Column

- 1 x 3 mL  $\text{CH}_3\text{OH}$
- 1 x 3 mL D.I.  $\text{H}_2\text{O}$
- 1 x 1 mL 100 mM phosphate buffer (pH 6.0)

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

### 3. Load Sample

- Place test tubes into vacuum manifold for collection
- The sample loading and wash are both collected
- Decant sample onto column. Aspirate at ~1 inch Hg

### 4. Wash Column

- Add 1 mL of  $\text{CH}_3\text{OH}$  /  $\text{NH}_4\text{OH}$  (99:1) to original sample test tube; Vortex
- Decant wash onto column

**Note:** Aspirate at ~1 inch of Hg

### 5. Concentrate

- Evaporate to dryness at 60°C using a stream of air or  $\text{N}_2$

### 6. Sample Clean Up

- Add 200  $\mu$ L of dimethylformamide
- Add 1 mL of hexane saturated with dimethylformamide
- Mix by inversion for 5 minutes
- Centrifuge at 3000 rpm for 5 minutes
- Transfer lower dimethylformamide layer to a clean test tube

### 7. Concentrate

- Evaporate to dryness at < 50°C using a stream of air or  $\text{N}_2$

### 8. Derivatize

- Add 100  $\mu$ L ethyl acetate and 100  $\mu$ L BSTFA with 1% TMCS.
- Mix/vortex.

### 9. Quantitate

- Inject 1 to 2  $\mu$ L onto gas chromatograph.



**MSD Ions:**

Analyte	Primary Ion	Secondary	Tertiary	Cerilliant #
GHB-D <sub>6</sub> -di-TMS	239	240	241	G-006
GHB-di-TMS	233	234	235	G-001

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