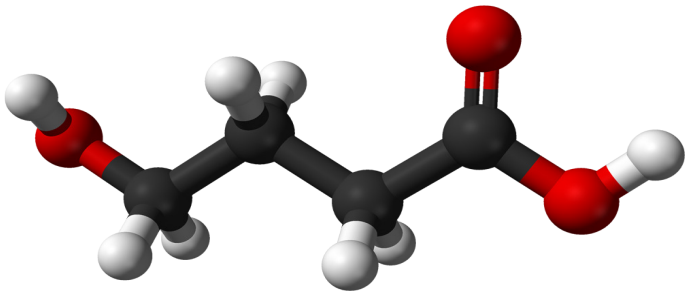
A Solid-Phase Method For Gamma-Hydroxybutyrate (GHB) In Urine Without Conversion To Gamma-Butrylactone (GBL)



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

a) To 200 µL of urine add internal standard and 100 µL of 100 mM phosphate buffer (pH 6.0). Mix/vortex

2. Condition Clean Screen® GHB Extraction Column

a) 1 x 3 mL CH_3OH
b) 1 x 3 mL D.I. H_2O
c) 1 x 1 mL 100 mM phosphate buffer (pH 6.0)

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

3. Load Sample

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

4. Wash Column

a) Add 1 mL of CH_3OH /NH_4OH (99:1) to original sample test tube; Vortex
b) Decant wash onto column

Note: Aspirate at ~1 inch of Hg

5. Concentrate

a) Evaporate to dryness at 60°C using a stream of air or N_2

6. Sample Clean Up

a) Add 200 µL of dimethylformamide
b) Add 1 mL of hexane saturated with dimethylformamide
c) Mix by inversion for 5 minutes
d) Centrifuge at 3000 rpm for 5 minutes
e) Transfer lower dimethylformamide layer to a clean test tube

7. Concentrate

a) Evaporate to dryness at < 50°C using a stream of air or N_2

8. Derivatize

a) Add 100 µL ethyl acetate and 100 µL BSTFA with 1% TMCS.
b) Mix/vortex.

9. Quantitate

a) Inject 1 to 2 µL onto gas chromatograph.

FORENSICS

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MSD Ions:

Analyte	Primary Ion	Secondary	Tertiary	Cerilliant #
GHB-D_6-di-TMS	239	240	241	G-006
GHB-di-TMS	233	234	235	G-001

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