TS 8/8/2024

Worklist: 6887

LAB CASE	ITEM	ITEM TYPE	DESCRIPTION
M2024-2002	2	UCK	AM 6 Urine GHB
M2024-2846	2	UCK	AM 6 Urine GHB
P2024-2081	2	UCK	AM 6 Urine GHB

AM 6: Urine GHB Screening Extraction

Extraction Date: 07/30/2024 **Mobile phase A**: 0.1% Formic Acid in Water 0.1% formic acid in methanol **Blank Urine Lot**: POC021022 **LCMS-QQQ ID**:069901 Analyst: Tamara Salazar **Mobile phase B:** 0.1% Formic Acid in MeOH 0.1% formic acid in water **Column**: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Pre-Analytic:

- ☑ 1. Positive Control Working Solution Preparation Instructions:
 - *Working Solution:* Preparation of 200,000 ng/mL Positive Control Working Solution: Add 200µL of GHB 1 mg/mL stock solution to 800µL negative urine.
- \boxtimes 2. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- ⊠ 3. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

- ☑ 1. Remove working solutions, controls, and samples from cold storage. Place on tube rocker at ambient temp for approx. 10 minutes.
- \boxtimes 2. Label centrifuge tubes for positive control, negative control and case samples.
- \boxtimes 3. Pipette positive control into corresponding centrifuge tube.
 - Preparation of 10,000 ng/mL Positive Control: Add 10μL of GHB 20,000 ng/mL working solution to 190μL negative urine. Working Solution Lot: WS061824
- \boxtimes 4. Pipette negative controls (for negative control, 200µL urine will be added to the appropriate tube) into corresponding centrifuge tube.
- \boxtimes 5. Add 200µL urine to each centrifuge tube for case samples.
- \boxtimes 6. Add 100µL of the GHB-D6 Internal Standard Working Solution to each tube.
- \boxtimes 7. Add 900µL of 0.1% formic acid in methanol to each tube. Vortex.
- \boxtimes 8. Centrifuge at ~3400 rpm for 15 minutes.
- 9. Label ALS or LCMS vials for positive control, negative control, and case samples. Place insert in all vials.
- \boxtimes 10. Add 100µL 0.1% formic acid in water to each vial insert.
- \boxtimes 11. Transfer 10µL of sample from each centrifuge tube to the corresponding vial insert (avoid disturbing the pellet at the bottom). Vortex.

Post-Analytic

- \boxtimes 1. Open quantitation software and create a new quantitation batch.
- \boxtimes 2. Using the positive control, a 1-point calibration curve will be established. The curve will be set to linear, non-weighted and origin set to force.
- ☑ 3. If a sample gives a response that is greater than 10,000 ng/mL, a statement on the report will be included saying that preliminary testing indicated a possible presence of an elevated level of GHB and that it is recommended that the sample be sent to a private lab for quantitation. If a sample gives a response between 7,000 and 10,000 ng/mL, an inconclusive statement can be added to the report.
- \boxtimes 4. The S/N for samples and controls at and over 10,000 ng/mL must be 5 or greater
- ☑ 5. Case samples and negative controls will generally be considered negative if the calculated concentration is less than 7,000 ng/mL.
- ☑ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Working solution prep sheet(s), Calibration and Control Reports

COMMENTS:

Idaho State Police Forensic Services

AM #6 Screening for Gamma-Hydroxybutyrate (GHB) in Urine

GHB-D6 Internal Standard Solution

1mL of GHB-D6 0.1mg/mL stock solution to 4mL methanol.

Component	Source	Source Lot Number	Expiration Date
GHB-D6	Cerilliant	FE1012220	02/28/2028
Methanol	Fisher	222621	-
Prepared:	06/18/2024		
Prepared By:	Tamara Salazar		
Expires:	06/18/2025		

200,000 ng/mL Positive Control Working Solution (WS061824) 200uL of GHB 1mg/mL stock to 800uL negative urine.

Component	Source	Source Lot Number	Expiration Date
GHB	Cerilliant	FE03012210	07/31/2027
Negative Urine	-	POC021022	
Prepared:	06/18/2024		
Prepared By:	Tamara Salazar		
Expires:	12/18/2024		

AM #6 GHB Screen Results



D:\MassHunter\Data\2024\AM 25 26\073024 AM 25 26 TS\QuantResults\AM 6.batch.bin **Batch results** Calibration Last Update 7/31/2024 7:53:06 AM

Falco (069901) Instrument Туре Cal Acq. Method GHB urine screen.m **Sample Position** P3-A1 **Injection Volume** 2.5 Acq. Date-Time Sample Info.

7/30/2024 11:02:02 PM

Data File Sample Operator Comment Positive Control_GHB.d Positive Control_GHB Tamara Salazar

Sample Chromatogram



AM #6 GHB Screen Results



 Batch results
 D:\MassHunter\Data\2024\AM 25 26\073024 AM 25 26 TS\QuantResults\AM 6.batch.bin

 Calibration Last Update
 7/31/2024 7:53:06 AM

InstrumentFalco (0TypeSampleAcq. MethodGHB uriSample PositionP3-A2Injection Volume2.5Acq. Date-Time7/30/20Sample Info.Sample Info.

Falco (069901) Sample GHB urine screen.m P3-A2 2.5 7/30/2024 11:08:40 PM Data File Sample Operator Comment Negative Control_GHB.d Negative Control_GHB Tamara Salazar

Sample Chromatogram

