

Rapid Response™

GHB Spiked Drink Drug Test Strip

(Beverages)

REF GHB-8S154-100

Product Insert

A rapid test for the qualitative detection of GHB in beverages.

For beverage safety testing use only.

Intended Use

The Rapid Response™ GHB Spiked Drink Drug Test Strip can detect the presence of GHB in human urine or beverage at concentrations from 10 µg/mL to 50 µg/mL.

Parameter	Calibrator	Cut-off (µg/mL)
GHB	Gamma-hydroxybutyric acid	10

Summary

A qualitative assay for GHB requires the dehydrogenation reaction to be pulled to completion by coupling to another reaction. GHB-DH catalyzes the reaction of GHB and NAD to produce NADH, and a diaphorase couple tetrazolium dye reaction results in the production of a purple dye complex.

Principle

GHB-DH catalyzes the reaction of GHB and NAD to produce NADH, and a diaphorase-coupled tetrazolium dye reaction results in the production of a purple dye complex.

Summary

γ-Hydroxybutyric acid (GHB)

γ-Hydroxybutyric acid (GHB) is an endogenous metabolite in the brain and peripheral organs. It has many characteristics of a neurotransmitter and has been studied for potential therapeutic use in the treatment of narcolepsy, drug addiction, and symptoms of withdrawal and to induce anesthesia. However, GHB also is widely abused. At higher doses, GHB produces sedation and a trance-like state with loss of memory. Because it has little smell or taste, it can be ingested un-knowingly. This combination of properties has made GHB a drug used for drug-facilitated sexual assault (colloquially know as Date Rape), often administered to victims in beverages ^[1,2].

Materials

Materials provided

- Test strips
- Product insert

Materials required but not provided

- Clock, timer, or stopwatch

Warnings and Precautions

- For forensic use only.
- **A positive or negative test result is NOT an indication that the substance being examined is safe to use.** Many factors

come into play when examining the samples, including but not limited to mixture of multiple substances, solubility, and pH of the sample.

- **BTNX Inc. does not encourage the use, supply, or production of illegal drugs or controlled substances in any way. The device is intended for harm reduction purposes.** Follow the advice of your local harm reduction or public health agency.
- The test device is NOT intended to determine the purity, composition, or if the liquid being examined is safe to use.
- Users of Rapid Response™ GHB Spiked Drink Drug Test Strip accept all responsibility for any injury or death that may occur after consuming beverages, whether they have been tested for contaminants or not. Rapid Response™ GHB Spiked Drink Drug Test Strip provides additional information but does not eliminate risks. Users must accept and be accountable for potential consequences.
- The Rapid Response™ GHB Spiked Drink Drug Test Strip only gives an indication and should be used solely as a presumptive guide to work in conjunction with further analysis such as Gas Chromatography Mass Spectrometry (GCMS) or High Performance Liquid Chromatography (HPLC). For complete analysis, we recommend all samples should be sent to a professionally certified laboratory.
- There is a possibility that technical or procedural errors as well as other substances and factors may interfere with the Rapid Response™ GHB Spiked Drink Drug Test Strip and cause false results.
- A positive result indicates the presence of GHB only and does not indicate quantity or concentration.
- A negative result does not at any time rule out the presence of GHB as they may be present below the minimum detection level of the test.
- Do not use after expiration date indicated on the package. Do not use the test if its foil pouch is damaged. Do not reuse tests.
- Read the entire procedure carefully prior to performing any tests.
- Humidity and temperature can adversely affect results.
- The used testing materials should be discarded in accordance with local, state and/or federal regulations.
- There are no direct therapeutic or diagnostic claims being made for this product. These tests are not involved in diagnosing, treating, mitigating

Reagents

Each test line contains anti-drug antibody and corresponding drug-protein conjugates. The control line contains goat anti-rabbit IgG polyclonal antibodies and rabbit IgG. The test contains GHB-DH, NAD, Diaphorase, Tetrazolium Dye and other additives.

Storage and Stability

Store as packaged in the sealed pouch at room temperature or refrigerated (35.6-86°F; 2-30°C). The test is stable through the expiration date printed. **DO NOT**

FREEZE. Do not use beyond the expiration date.

Collection and Storage of Specimens

Beverages Assay

The beverage specimen could be collected in a clean and dry container.

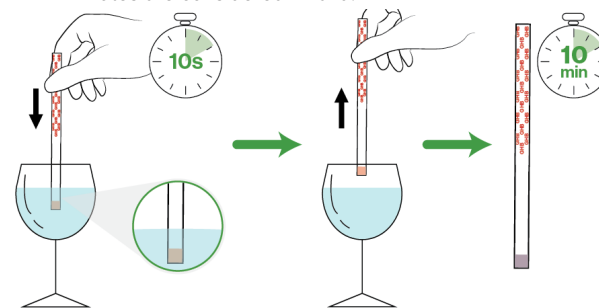
Specimen Storage

Beverage specimens may be stored at 35.6-46.4°F (2-8°C) for up to 48 hours prior to testing. For prolonged storage, specimens may be frozen and stored below -4°F (-20°C). Frozen specimens should be thawed and mixed before testing.

Test Procedure

Bring tests, specimens, buffer and/or controls to room temperature (15-30°C) before use.

1. Remove the test strip from its sealed pouch and use it as soon as possible. For best results, the assay should be performed within one hour.
2. Hold the strip by the end where the product name is printed. To avoid contamination, do not touch the strip sampling pad.
3. Immerse sampling tip into the beverage for about 10 seconds and then place the test on a clean flat surface.
4. Read the results at 10 minutes by comparing to the color chart printed on the back of the pouch. Results after 15 minutes are considered invalid.



Results Interpretation

Use the color chart on the product pouch to interpret GHB levels at the three indicated semi-quantitative GHB concentrations. The 0 µg/mL level indicates that no significant GHB is present, the 10 µg/mL level and the 50 µg/mL level indicates a presumptive positive.

Limitations

1. The Rapid Response™ GHB Spiked Drink Drug Test Strip provides only a qualitative, preliminary analytical result. A secondary analytical method must be used to obtain a confirmed result. Gas chromatography mass spectrometry (GC/MS) or Liquid Chromatography mass spectrometry (LC/MS) are the preferred confirmatory method ^[3].
2. Dark condensed juice (such as high concentration Grenadine juice) may affect the background color of the




GHB pad, thus affecting the interpretation of the results. If the concentration of grenadine juice is less than or equal to 10%, it has no effect on the product.




3. A positive result does not indicate level or intoxication, administration route or concentration in beverage.
4. A negative result may not necessarily indicate drug-free beverage. Negative results can be obtained when the drug is present but below the cut-off level of the test.
5. This test does not distinguish between drugs and certain medications.


Bibliography

1. Bravo D T, Harris D O, Parsons S M. Reliable, Sensitive, Rapid and Quantitative Enzyme-Based Assay for Gamma-Hydroxybutyric Acid(GHB)[J].Journal of Forensic Sciences, 2004, 49(2):379-387.
2. Ureda N, Ruan W, French D, et al. Lack of gamma-hydroxybutyrate prevalence among an urban emergency department population[J]. Journal of Analytical Toxicology, 2010, 34(2):110-111.
3. Parsons S M, Harris D O, Bravo D T. Methods, compositions and apparatuses for detection of gamma-hydroxybutyric acid (GHB):US10098811[P]. US06703216 B2 [2023-11-03].

Glossary of Symbols

 Consult instructions for use
  Test per Kit
  Do Not Reuse

 Store between 35.6°F to 86°F
  Use by
  Catalogue #

 Lot Number

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