

Enzymatic testing for Ammonia in foodstuff and other sample materials
 Test-kit for 32 determinations on the RIDA®CUBE SCAN instrument (340 nm)

For in vitro use only
 Store between +2 and +8°C

Principle

Enzymatic test with Glutamate dehydrogenase (GIDH). NADH is consumed and is measured at 340 nm:



Reagents

- # 1: 32 tubes with 800 µl reagent 1 (NADH)
- # 2: 32 caps with 200 µl reagent 2 (GIDH, Oxoglutarate)
- # 3: one RFID-card (Radio Frequency Identification)

The reagents are stable up to the end of the indicated month of expiry, if stored at 2 - 8 °C. Do not freeze the reagents. Let the reagents reach the laboratory temperature before use (20 - 25 °C).

The general safety rules for working in chemical laboratories should be applied. Do not swallow! Avoid contact with skin and mucous membranes.

This kit may contain hazardous substances. For hazard notes on the contained substances, please refer to the appropriate material safety data sheets (MSDS) for this product, available online at www.r-biopharm.com. After use, the reagents can be disposed of with the laboratory waste. Packaging materials may be recycled.

Sample preparation

- Use clear and transparent samples directly, or after dilution into the relevant measuring range
- Filter or centrifuge turbid solution
- Degas samples containing carbon dioxide
- Carrez clarification cannot be used because Ammonia is unstable under the alkaline conditions of the Carrez reaction.
- Crush and homogenize solid samples and extract with water), filter or centrifuge. Use protein clarification if necessary (e.g. with trichloroacetic acid or perchloric acid).

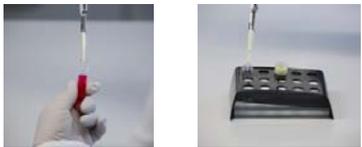
Assay specifications

The assay specifications are saved on the RFID card and are executed automatically by the instrument.

- Wavelength: 340 nm
- Temperature: 37 °C
- Calibration: calibration curve saved on RFID card
- Test sequence: sample + R1 / mix / 2 min / A1 / R2 / mix / 10 min / A2
- Sample volume: 20 µl (basic) or 100 µl (sensitive).
 The required volume should be pipetted precisely into the test tube (reagent 1).

The sample volume is 20 µl or 100 µl. For the sensitive application, it is also possible to pipette any dilution with 100 µl total volume (for example 50 µl sample and 50 µl water). Results must be recalculated accordingly.

Handling procedure

| | |
|---|---|
| Place the RFID-Card on the instrument |  |
| Enter sample data into the tablet app : - identification - volume (20 or 100 µl) |  |
| Pipette the sample into the test-tube (reagent 1) |  |
| Close the tube with the cap (reagent 2), insert it into the instrument and close the door |  |

Calculation of results

The results are given in mg/l by the instrument, and following ranges are recommended:
 - from 5 to 125 mg/l for the basic application (20 µl)
 - from 1 to 25 mg/l for the sensitive application (100 µl)

Notes

Use a quality control every day where a run is performed. If the deviation of this quality control is higher than 10%, it is recommended to measure the reagent blank with a water sample, and to subtract it from all future sample results.

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