

Delvotest® T



DSM 28/02 – 02/12
ALTERNATIVE ANALYTICAL
METHODS FOR AGRIBUSINESS
Certified by AFNOR Certification*
End of validity: see AFNOR website -
<http://nf-validation.afnor.org>,
search Delvotest® T.

Standard diffusion test for the detection of antibacterial substances in milk. 20260220

* Scope of the NF VALIDATION: Delvotest® T Ampoules (visual and Delvo®Scan reading), Delvotest® T Plates (visual, Delvo®Scan and DAS reading) for individual and commingled cow's milk. According to the protocol NF 102 VALIDATION for validation of methods for the detection and quantification of veterinary drugs in food products.

Contents

Ready to use tests with solid agar medium containing *Geobacillus stearothermophilus* and nutrients for the growth and bromocresol purple.

Caution

- As this test is extremely sensitive to antibacterial substances (antibiotics, sulfa compounds, and other components such as disinfectants, detergents etc.) any contamination with these substances should be prevented. Wash and dry hands before starting the test procedure. Use a clean table.
- Do not handle the tests roughly since this may loosen the solid agar medium. This may affect the quality of the test colors during reading of the test results.

Detection sensitivity and Selectivity

Information on the full broad-sensitivity spectrum of the test sensitivity is available via your dsm-firmenich distributor. The best test sensitivity is reached when measuring at control time. To determine the control time: pipette 0.1 mL of milk, free from antibacterial substances (available as Negative Control via your dsm-firmenich distributor), into the first ampoule/well. Start reading the color result of the negative control milk sample (first ampoule/well) after an incubation time of 2 hours 45 minutes. If the color has not changed to yellow, the tests should be immediately returned to the incubating device until a partially yellow reading of the negative control sample is achieved (it is recommended to repeat the readings at intervals of 5 minutes). When the color of the negative control test has turned to yellow, all other tests (samples) can be read. At control time the sensitivity of the Delvotest® T is for Penicillin G at 4 ng/g, for Sulfadiazine at 100 ng/g and for Oxytetracycline at 100 ng/g. To optimize reliability, dsm-firmenich advises to verify the correct functionality of the test, operations and incubation with negative control and positive control milk samples available at dsm-firmenich.

Directions

1. Preheat the incubation device - The temperature of the dry incubator, water bath or Delvotest® Accelerator Smart should be set at 64 ± 2 °C.
2. Select the required number of test material - Detach one or more ampoules or break the plate in blocks depending on the number of milk samples to analyze. Use scissors or a knife if needed. Remove the aluminum foil from the plate or perforate the foil of ampoules carefully. Take care that the aluminum foil from the remaining tests is not damaged, if so, the test will dry out. Place back the remaining tests in appropriate storage conditions immediately.
3. Pipette 0.1 mL of sample in the test. For each sample use a new and clean pipette. Clearly indicate each test with for example a sample number. Milk samples should be representative of the milk to be tested and homogenized. If milk from individual animals is tested do not use the first milk drops. Milk all four quarters from the cow to be analyzed and mix gently the milk without creating foam. A one-way pipette should never be used for more than one milk sample. Small droplets from other samples are enough to contaminate clean samples. Do not contaminate the remaining pipettes with milk.
4. Incubate the test - When using test in plates, cover the plates using included adhesive foil. Incubate the test plates or ampoules in the pre heated dry incubator or water bath. Incubate the test for the advised time (see above).
5. Reading - The color should be read from the 2/3 parts of the ampoule or from underneath the test plate. If the test is (partially) yellow, the test is negative: the milk analyzed does not contain antibiotics or the antibiotic concentration is below the detection sensitivity of the test. The result is positive when the test is predominantly purple: the sample of milk contains antibiotics at or above the detection sensitivity of the test.
6. Optionally plates can be incubated and read in an automatic way using Delvotest® Accelerator Smart (DAS).

Additional information

Further information, including sensitivity for specific substances, effect of the incubation time on the sensitivity of the test, other species than raw cow milk or applications, may be obtained by contacting dsm-firmenich local representatives. Note: Delvotest® T is not sensitive to quinolones. The control time (the one measured with a negative control sample) may increase over the shelf life of the tests. Tests nearing the expiry date may thus require a somewhat longer control time than freshly produced ones. There is no effect of the shelf life on the test detection sensitivity at control time.

Storage

The tests should be stored upright in the original packaging, in the dark at a constant temperature at 6 ± 2 °C, protected from freezing. Lower and/or fluctuating temperatures may result in softening of the contents, leading to loosening of the agar or the formation of air bubbles. Storage at a higher temperature will shorten the shelf life.

For USA: NOT INTENDED FOR NCIMS TESTING

To the best of our knowledge, the information contained herein is accurate and complete. However, nothing contained herein shall be construed to imply any warranty or guarantee.