

SNAP* Tetracycline Test Kit (tetracycline, chlortetracycline, oxytetracycline)



Not for use in NCIMS milk-regulatory programs.

06-12015-01

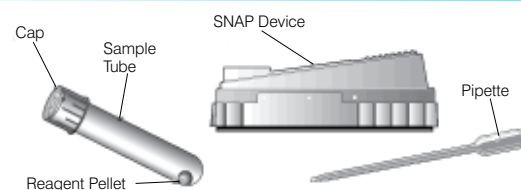
Product and Intended Use

The SNAP* Tetracycline Test is an enzyme-linked immunoassay which will detect tetracycline, chlortetracycline and oxytetracycline residues in raw commingled cow milk. The SNAP Tetracycline Test Kit is easy to use: just follow the instructions outlined in this manual. If necessary, contact IDEXX for additional training.

Introduction

Tetracycline antibiotics are widely used in the treatment of mastitis and other infections in dairy cattle. Failure to follow antibiotic label instructions and milk withholding guidelines may result in antibiotic residues in milk. The SNAP Tetracycline Test is designed to provide convenience and ease-of-use in monitoring tetracycline residues as part of a quality assurance program.

Kit Components



Components Required, But Not Provided (Available through IDEXX)

- Block Heater capable of maintaining an operating temperature of 45°C (113°F) ± 5°C.

Accessories (Available through IDEXX)

- SNAPshot* Reader
- SNAP stop solution

Storage

All materials must be refrigerated at 2°–7°C (36°–45°F). Tests can be kept at room temperature, 18°–29°C (65°–85°F), during the day of use. Unused tests must be returned to refrigeration.

Sample Information

- Raw commingled cow milk must be used.
- Samples must be refrigerated and tested within three days of collection.
- Thoroughly mix the sample before testing.
- DO NOT use abnormal-looking milk.

Precautions and Warnings

- The SNAP device must remain in the heater block for the duration of the test.
- Do not mix sample tubes and devices from different kits.
- Do not use kit components past their expiration dates.
- If the control spot fails to develop color, retest the sample.
- The SNAP device must be run in a horizontal position.

Before You Begin

- Tests can be kept at room temperature during the day of use.
- Preheat the heater block to 45°C (113°F) ± 5°C.
- Shake the milk sample thoroughly.
- SNAP device has a pink color on the undeveloped spots in the results window and in the activation circle.
- When pipetting, take the sample from the middle of the sample container and slowly draw the sample into the pipette to avoid air bubbles.

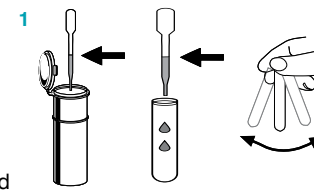
Test Preparation

- Remove the SNAP device, pipette and sample tube from the bag.
- Check that your heater block has been preheated and the thermometer has held at 45°C (113°F) ± 5°C for at least 5 minutes.
- Check that the reagent pellet is at the bottom of the sample tube. If not, tap the tube to return the pellet to the bottom.

Test Procedure

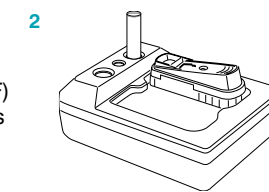
1. Pipetting the Sample

- Place the SNAP device in the heater block.
- Remove and discard the sample tube cap.
- Shake the milk sample thoroughly.
- With the IDEXX pipette, draw up the milk sample (450 µL ± 50 µL) to the indicator line.
- Carefully add all of the milk sample from the pipette to the tube, and then shake the sample tube to dissolve the reagent pellet.



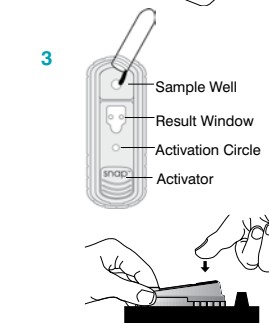
2. Incubating the Sample

- Incubate the sample tube in the preheated heater block at 45°C (113°F) ± 5°C for 5 minutes. Incubation must occur for a minimum of 5 minutes and no longer than 6 minutes.



3. Adding the Sample to the SNAP Device

- Pour the contents of the sample tube into the sample well of the SNAP device and discard the tube. The sample will flow across the results window toward the pink activation circle.
- When the pink activation circle begins to disappear, push the activator button FIRMLY until it snaps flush with the body of the SNAP device.
- Wait 4 minutes.



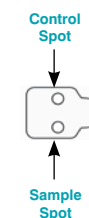
NOTE: The SNAP device must remain on the heater block during color development.

NOTE: Blue control and sample spots will develop during the 4 minutes.

Interpreting Test Results

If color development does not occur in the control spot, retest the sample.

- SNAPshot Reader:** Insert the SNAP device immediately after color development and follow the instructions for reading the device.
- Visual Read:** When interpreting results, position the SNAP device with the sample well to the left. If color development does not occur in the control spot, retest the sample.



Negative Result

The sample spot is darker than or equal to the control spot.



Positive Result

The sample spot is lighter than the control spot.



NOTE: Results will remain stable for 60 minutes if 5 drops of stop solution are added to the SNAP device immediately after color development.

Performance Information

Sensitivity

The SNAP Tetracycline Test Kit will detect the following drugs in raw commingled cow milk at or below these levels: tetracycline 50 ppb, chlortetracycline 100 ppb and oxytetracycline 50 ppb.

Cross Reactivity:

| Drug | % Positive at 10 ppb | % Positive at 20 ppb | % Positive at 30 ppb |
|-------------|----------------------|----------------------|----------------------|
| Doxycycline | 30% | 90% | 100% |

The SNAP Tetracycline Test Kit does NOT cross-react with the following drugs at the levels indicated:

- Sulfamethazine (100 ppb)
- Ivermectin (10 ppb)
- Penicillin G (50 ppb)
- Amoxicillin (100 ppb)
- Ampicillin (100 ppb)
- Cloxacillin (100 ppb)
- Cephapirin (200 ppb)
- Ceftiofur (1000 ppb)
- Gentamycin (300 ppb)
- Neomycin (1500 ppb)
- Pirlimycin (4000 ppb)

SNAP Tetracycline Dilution Protocol

Optional: For customers requesting a protocol that will decrease sensitivity by threefold, IDEXX recommends the following:

Materials required but not provided:

- 0.2 mL–1.0 mL pipette
- 1.0 mL–2.0 mL pipette
- Pipette tips
- Mixing vial (minimum 2.0 mL)
- Previously screened raw commingled cow milk (negative milk)

- Pipette 1.0 mL of negative milk into a mixing vial.
- Pipette 0.5 mL of test sample into the same mixing vial.
- Mix by gently inverting 10 times.
- Run the diluted sample according to the procedure in the kit insert.

Sensitivity

When the dilution protocol is used, the SNAP Tetracycline Test Kit will detect the following drugs in raw commingled cow milk at or below these levels: tetracycline 150 ppb, chlortetracycline 300 ppb and oxytetracycline 150 ppb.

The detection limit of this test kit has been shown to be below tolerance levels for tetracycline, oxytetracycline and chlortetracycline. Sole reliance on this kit may result in the rejection of milk that is considered safe for human consumption. It is recommended that positive samples be further analyzed using a quantitative, drug specific method of analysis, when available.

For technical assistance, call IDEXX Technical Services at:

U.S. and Canada 1-800-321-0207
Europe 00800-329-43399
Japan 0081-422-71-59-21
All others 1-207-556-4630

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IDEXX
LABORATORIES

One IDEXX Drive
Westbrook, Maine 04092 USA
Tel: 1-207-556-0300 or 1-800-321-0207
Fax: 1-207-556-0630