# Sulfamethazine Test Kit 20 Tests





06-08934-00

## **Overview**

The SNAP\* Sulfamethazine Test Kit is an enzymelinked immunoassay (ELISA) designed to detect sulfamethazine residues in raw, commingled bovine milk. The SNAP Sulfamethazine Test Kit is easy to use: just follow the instructions outlined in this manual. If necessary, contact IDEXX for additional training.

Failure to follow antibiotic label instructions and milk withholding guidelines may result in antibiotic residues in milk. The SNAP Sulfamethazine Test Kit is designed to monitor sulfamethazine residues as part of a quality-assurance program.



# Kit Components

### **Required Component (Not Included)**

A SNAP<sup>\*</sup> Heater Block capable of maintaining an operating temperature of  $45^{\circ}C \pm 5^{\circ}C (113^{\circ}F \pm 9^{\circ}F)$ 

### Storage\_

All materials must be refrigerated at  $0^{\circ}-7^{\circ}C$  ( $32^{\circ}-45^{\circ}F$ ). Tests can be kept at room temperature ( $18^{\circ}-29^{\circ}C$ / $65^{\circ}-85^{\circ}F$ ) during the day of use. Remove from the refrigerator only the number of tests to be used for the day.

### Sample Information\_

- Raw, commingled bovine 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 kit lots.
- Do not use the kit past the expiration date.
- If the control spot fails to develop color, the test is invalid. Retest the sample.
- If the sample fails to reach the activation circle, the test is invalid. Retest the sample.
- If a high blue background occurs, the test is invalid. Retest the sample.
- The SNAP device must be run in a horizontal position.

## **Test Preparation**

- Tests can be kept at room temperature during the day of use.
- Remove the SNAP device, pipette and sample tube from the bag.

**NOTE:** An unused SNAP device should have a lime-green color on the control and sample spots, and in the activation circle.

- Ensure that the heater block has been preheated and that the temperature has been maintained at 45°C ±5°C (113°F ±9°F) for at least 15 minutes.
- Shake the milk sample thoroughly.
- Verify that the reagent pellet is at the bottom of sample tube. (If not, tap the tube to return the pellet to the bottom.)

### Test Procedure\_

- 1. Place the SNAP device in the heater block.
- 2. Shake the milk sample thoroughly.
- 3. Remove and discard the sample tube cap.
- 4. Using the provided pipette, draw up the milk sample (450  $\mu$ L ±50  $\mu$ L) to the indicator line.



**TIP:** When pipetting, take the sample from the middle of the sample container and slowly draw the sample into the pipette to avoid air bubbles.

- 5. Carefully add all of the milk sample from the pipette to the sample tube.
- Shake the sample tube to dissolve the reagent pellet.
- Incubate the sample tube in the preheated heater block (45°C ±5°C/113°F ±9°F) for 2 minutes.



**IMPORTANT:** Incubation must occur for a minimum of 2 minutes and no longer than 3 minutes.

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8. Pour the entire contents of the sample tube into the sample well of the SNAP device, and then discard the sample tube.

**NOTE:** The sample will flow across the results window toward the lime-green activation circle.

 When the lime-green activation circle begins to disappear, push the activator firmly until it snaps flush with the body of the SNAP device. 8 Activation circle CCC CCC Activation Sample well Activator Results window



**NOTE:** When the edge of the activation circle nearest the sample well begins to turn from lime-green to white, activation should occur. Do not let the circle completely disappear.

10. Wait 7 minutes for color development.

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

**NOTE:** The blue control and sample spots will develop during the seven minutes.

#### Visual Interpretation

Read the results immediately. Refer to the "Visually Interpreting Test Results" section to interpret the results.

#### SNAPshot<sup>®</sup> Reader Interpretation

Read the test results immediately. Refer to the SNAPshot Reader manual for instructions.

### **Visually Interpreting Test Results**

When interpreting the test results, position the SNAP device with the sample well to the left, as shown in the diagram. 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.



### Performance Information

#### Sensitivity

The SNAP Sulfamethazine Test Kit is designed to detect sulfamethazine residues in raw, commingled bovine milk at or below 10 ppb.

The detection limit of this test has been shown to be below FDA safe levels for sulfamethazine. 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.

#### **Cross-Reactivity**

The SNAP Sulfamethazine Test Kit cross-reacts with the following drugs at the levels indicated.

Drug	% Positive at 10 ppb	% Positive at 100 ppb
Sulfamerazine	10%	100%
Sulfadiazine	0%	20%

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

- Sulfadimethoxine (100 ppb)
- Sulfanilamide (100 ppb)
- Amoxicillin (100 ppb)
- Cloxacillin (100 ppb)
- Naxcel (200 ppb)

- Sulfathiazole (100 ppb)
- Penicillin G (50 ppb)
- Ampicillin (100 ppb)
- · Cephapirin (200 ppb)

For technical assistance, call IDEXX Technical Services at 1-800-321-0207.



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