

# How to understand bacteria results on the SediVue Dx Urine Sediment Analyzer

Bacteria result (rods/cocci)	Definition	Possible reason for validation	Recommended next steps
<b>None detected</b>	The element has not been detected or there are not enough recognizable features to classify.	Patient has clinical signs or a history of persistent urinary tract infections.	If visual review of images is negative and patient has no clinical signs or history, bacteriuria is unlikely. No further action is necessary.
<b>Suspect presence</b>	Some recognizable features of an element (cocci, rods, casts) are present; however, the quantity or detail is insufficient to report as "present."	Crystalline or amorphous debris is common in canine and feline samples (especially free catch).	Differentiate bacteria from debris. Review visually; if confirmed, diagnose and manage based on your interpretation. <ul style="list-style-type: none"><li>• If, however, visual review is inconclusive and white blood cells, red blood cells, clinical signs, and/or history of urinary tract infection are present, confirm presence of bacteria with a dry prep.</li><li>• If, however, visual review is inconclusive and there are no supporting clues present (e.g., active urine sediment, history), the presence of bacteria is unlikely.</li></ul>
<b>Present</b>	There is high confidence that bacteria are present in the sample.	Bacteria results may be confounded by other debris and artifacts in the sample (e.g., sperm, crystalline debris).	If visual review of images is confirmatory and/or the patient has clinical signs or history, bacteriuria is likely. No further action is necessary.

# When urinalysis and culture results don't align, which is right? Sometimes both.

Bacteria result (rods/cocci)	Culture result	Causes for discordant results
<b>Present</b>	No growth	<p>Bacterial growth was inhibited or prevented by:</p> <ul style="list-style-type: none"><li>• Antibiotic treatment at time of sample collection.</li><li>• Exposure of sample to extreme temperatures.</li><li>• Extremes of urine pH (<math>\leq 4</math> or <math>\geq 9</math>).</li><li>• High quantity of white blood cells in urine.</li></ul> <p>Microscopy results misidentified amorphous or crystalline debris as bacteria.*</p> <p>False identification of cocci was due to random motion of small colloidal particles (Brownian motion).*</p> <p>Stain used on urine sample prior to in-house microscopy was contaminated by bacteria.</p> <p>Anaerobic bacteria were identified by the analyzer but cannot be grown in aerobic cultures (rare).</p> <p>*Particularly with unstained urine sediment examinations.</p>
<b>None detected</b>	Positive	<p>Bacteria colony counts are too low to be visualized on urine sediment analysis because of:</p> <ul style="list-style-type: none"><li>• Very dilute urine.</li><li>• Incomplete or unsuccessful antibiotic therapy.</li><li>• Localized pyelonephritis.</li></ul> <p>In cases where clinical history is suggestive of urinary tract infection or an active urine sediment is present, urine culture should be considered even in the absence of bacteriuria on urinalysis.</p>

# When do you need a dry prep?

How to do it in 5 minutes or less.

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## When?

A dry prep should be considered only when you are unable to visually confirm absence or presence and:

- Patient has clinical signs or previous history.
  - Other supporting results in the sample (e.g., white blood cells, red blood cells).
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## Why?

A dry prep (air-dried, stained cytological slide) is a quick, effective way to:

- Validate the absence or presence of bacteria.
  - Distinguish bacteria from amorphous or crystalline debris.
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## How?

You can do a dry prep in 5 minutes or less!  
Watch a short video to learn how.

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# Bacteria aren't tagged on your urine sediment images. Here's why:

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The SediVue Dx® Urine Sediment Analyzer **classifies and counts all bacteria** without tagging them as tagging bacteria could be overwhelming and block your visual interpretation.

Image tags are also not available when:

- The sample is overcrowded and the results are suppressed.
  - Testing species other than canine and feline.
  - Sample types other than urine are run.
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