

ACID FAST BACILLUS CULTURE REPORTING CHANGES

In an effort to make AFB Culture Final Reports clearer, SHL will employ 5 new tests to ensure that results appear on the final report in the order they are released. These changes will be effective 4/21/2023. There is no change to the testing being performed.

The Acid Fast Bacillus Culture test will appear on the final report numbered 1 – 3, with a preliminary tag attached to the appropriate culture results. The numerical value attached to the culture <u>is not</u> associated with any specific result and is for SHL internal processes only.

The Mycobacterium Tuberculosis Complex Susceptibility test will also appear on the final report numbered 1 and 2. Preliminary susceptibility results will be reported in the test numbered 1, with final susceptibilities reported in the test numbered 2.

Example final reports with these changes are included below. Please call the Mycobacteriology lab (319-335-4256) for questions.

Negative Culture Report

RESULTS OF ANALYSIS - FINAL REPORT

| RESULT | MODIFIER | ANALYSIS NOTE(S) |
|---------------------|---|------------------------------|
| e-Rhodamine Stain) | | 1 |
| Negative | | |
| | | |
| RESULT | | ANALYSIS NOTE(S) |
| L A | | 2 |
| No Acid Fast Bacill | us isolated after 3 weeks | |
| | | 2 |
| No Acid Fast Bacill | us isolated | |
| | Re-Rhodamine Stain) Negative RESULT No Acid Fast Bacill | ne-Rhodamine Stain) Negative |

SAMPLE AND ANALYSIS NOTES

- Interpretation: At 400X examination: No Acid Fast Bacillus seen = 0 rods seen; 1+ = 4-36 rods/100 fields; 2+ = 4-36 rods/10 fields; 3+ = 4-36 rods/field; 4+ = >36 rods/field.
- SHL will only perform susceptibility testing on isolates identified as Mycobacterium tuberculosis complex. SHL does not
 perform susceptibility testing on nontuberculous mycobacteria (NTM) but can refer isolates for NTM susceptibility testing.
 For more information, please call 319-335-4256.

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NTM Positive Report

RESULTS OF ANALYSIS - FINAL REPORT

RESULT MODIFIER ANALYSIS NOTE(S) Fluorescent Acid Fast Bacillus Smear, Fluorochrome (Auramine-Rhodamine Stain)

Acid Fast Bacillus Fluorescent Smear Positive 3+

RESULT ANALYSIS NOTE(S)

Acid Fast Bacillus 1, Bacterial Culture Acid Fast Bacillus Culture 1 No Acid Fast Bacillus isolated after 3 weeks

Acid Fast Bacillus 2. Bacterial Culture

Acid Fast Bacillus Culture 2 Acid Fast Bacillus isolated, Identification to follow

MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert

MTB target DNA sequence Not Detected Rifampin mutation in the rpob gene Not Applicable

MODIFIER ANALYSIS NOTE(S)

Nontuberculous Mycobacteria Isolate Identification, MALDI-TOF Spectrometry

Organism Identified Mycobacterium avium

MTB Positive Report

RESULTS OF ANALYSIS - FINAL REPORT

MODIFIER TEST RESULT ANALYSIS NOTE(S)

Fluorescent Acid Fast Bacillus Smear, Fluorochrome (Auramine-Rhodamine Stain) Acid Fast Bacillus Fluorescent Smear Positive

ANALYSIS NOTE(S)

MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert

Submitter Smear Result Date of Digest/Decon

Sample Processed At SHL

MTB target DNA sequence Detected Rifampin mutation in the rpob gene Detected

Acid Fast Bacillus 1, Bacterial Culture

Acid Fast Bacillus Culture 1 Acid Fast Bacillus isolated with contaminants

MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert 3

MTB target DNA sequence Detected

Rifampin mutation in the rpob gene Detected

Mycobacterium tuberculosis complex Susceptibility 1, Liquid Culture

Isoniazid (0.1 ug/mL) Susceptible Rifampin (1.0 ug/mL) Susceptible Ethambutol (5.0 ug/mL) Pending Pyrazinamide (100 ug/mL) Susceptible

Mycobacterium tuberculosis complex Susceptibility 2, Liquid Culture

Isoniazid (0.1 ug/mL) Susceptible Rifampin (1.0 ug/mL) Susceptible Ethambutol (5.0 ug/mL) Susceptible Pyrazinamide (100 ug/mL) Susceptible

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