

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 is not 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

TEST	RESULT	MODIFIER	ANALYSIS NOTE(S)
Fluorescent Acid Fast Bacillus Smear, Fluorochrome (Auramine-Rhodamine Stain) Acid Fast Bacillus Fluorescent Smear	Negative		1
Acid Fast Bacillus 1, Bacterial Culture - Preliminary Acid Fast Bacillus Culture 1	No Acid Fast Bacillus isolated after 3 weeks		2
Acid Fast Bacillus 2, Bacterial Culture Acid Fast Bacillus Culture 2	No Acid Fast Bacillus isolated		2

SAMPLE AND ANALYSIS NOTES

1. 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.
2. 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.

NTM Positive Report

RESULTS OF ANALYSIS - FINAL REPORT

TEST	RESULT	MODIFIER	ANALYSIS NOTE(S)
Fluorescent Acid Fast Bacillus Smear, Fluorochrome (Auramine-Rhodamine Stain) Acid Fast Bacillus Fluorescent Smear	Positive	3+	1
Acid Fast Bacillus 1, Bacterial Culture Acid Fast Bacillus Culture 1	No Acid Fast Bacillus isolated after 3 weeks		2
Acid Fast Bacillus 2, Bacterial Culture Acid Fast Bacillus Culture 2	Acid Fast Bacillus isolated, Identification to follow		2
MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert MTB target DNA sequence	Not Detected		3
Rifampin mutation in the rpoB gene	Not Applicable		
Nontuberculous Mycobacteria Isolate Identification, MALDI-TOF Spectrometry Organism Identified	Mycobacterium avium complex		4

MTB Positive Report

RESULTS OF ANALYSIS - FINAL REPORT

TEST	RESULT	MODIFIER	ANALYSIS NOTE(S)
Fluorescent Acid Fast Bacillus Smear, Fluorochrome (Auramine-Rhodamine Stain) Acid Fast Bacillus Fluorescent Smear	Positive	3+	1
MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert Submitter Smear Result	SHL		
Date of Digest/Decon	Detected		
Sample Processed At	Detected		
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		2
MTB Complex and Rifampin DNA, Nucleic Acid Amplification Cepheid GeneXpert MTB target DNA sequence	Detected		3
Rifampin mutation in the rpoB gene	Detected		
Mycobacterium tuberculosis complex Susceptibility 1, Liquid Culture Isoniazid (0.1 ug/mL)	Susceptible		4
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		4
Rifampin (1.0 ug/mL)	Susceptible		
Ethambutol (5.0 ug/mL)	Susceptible		
Pyrazinamide (100 ug/mL)	Susceptible		