

Lakeland Laboratory

Blood Culture Identification by PCR 2.0 Update

Available now, Spectrum Health Lakeland offers an expanded multiplex PCR panel in house for rapid identification to aid in the diagnosis of blood stream infections. This assay is automatically performed on blood culture samples identified as positive by a continuous monitoring blood culture system.

The BioFire FilmArray Blood Culture Identification Panel tests for 33 pathogens and 10 resistance genes simultaneously

Superior sensitivity and specificity for detection for the most common bloodstream pathogens. This FDA-cleared test provides an overall sensitivity and specificity of 99% and 99.8%, respectively (Compared to blood bacterial culture and to two PCR assays with bi-directional sequencing)

New targets indicated in Green

Gram Positive Bacteria		
<i>Enterococcus faecalis</i>	<i>Staphylococcus</i> spp.	<i>Streptococcus</i> spp.
<i>Enterococcus faecium</i>	<i>Staphylococcus aureus</i>	<i>Streptococcus agalactiae</i> (Group B)
<i>Listeria monocytogenes</i>	<i>Staphylococcus epidermidis</i>	<i>Streptococcus pneumoniae</i>
	<i>Staphylococcus lugdunensis</i>	<i>Streptococcus pyogenes</i> (Group A)
Gram Negative Bacteria		
<i>Acinetobacter calcoaceticus-baumannii complex</i>	Enterobacteriales	
<i>Bacteroides fragilis</i>	<i>Enterobacter cloacae</i> complex	
<i>Haemophilus influenzae</i>	<i>Escherichia coli</i>	
<i>Neisseria meningitidis</i>	<i>Klebsiella aerogenes</i>	
<i>Pseudomonas aeruginosa</i>	<i>Klebsiella oxytoca</i>	
<i>Stenotrophomonas maltophilia</i>	<i>Klebsiella pneumoniae</i> group	
	<i>Proteus</i> spp.	
	<i>Salmonella</i> spp.	
	<i>Serratia marcescens</i>	
Yeast		
<i>Candida albicans</i>	<i>Candida glabrata</i>	<i>Candida tropicalis</i>
<i>Candida auris</i>	<i>Candida krusei</i>	<i>Cryptococcus neoformans/gattii</i>
	<i>Candida parapsilosis</i>	
Antimicrobial Resistance Genes		
Note: Resistance mechanisms only reported if positive		
Carbapenemases	Colistin Resistance	Methicillin Resistance
<ul style="list-style-type: none"> • IMP • KPC • OXA-48-like • NDM • VIM 	<ul style="list-style-type: none"> • <i>mcr-1</i> 	<ul style="list-style-type: none"> • <i>mecA/C</i> • <i>mecA/C & MREJ (MRSA)*</i>
	ESBL	Vancomycin Resistance
	<ul style="list-style-type: none"> • CTX-M 	<ul style="list-style-type: none"> • <i>vanA/B</i>

*MREJ assay allows for more specific MRSA identification

For additional information or questions please contact Lakeland Laboratory Client Services:

- Call (269) 983-8311
- 1-800-513-9193

Or visit the Lakeland laboratory website: www.lakelandhealth.org/lab then select laboratory test menu