

Patient: DOB: Gender: John Doe 01/02/1901 Male Provider: Albert C Domm Practice: Lifetime Sciences Test Account 4037 Rural Plains Circle, Suite 150 Franklin, TN, 37064 
 Specimen:
 Copan eSwab

 Identifier:
 SP000-063-924

 Collected:
 06/02/2022 02:19pm

 Received:
 06/02/2022 02:28pm

 Reported:
 06/03/2022 10:34am

	Targets Not De	etected	
Target	Туре	Result	Estimated Microbial Load
Class A Beta-lactamases Resistance	ABRX	Not Detected	Not Detected
Class B Metallobeta-lactamases Resistance	ABRX	Not Detected	Not Detected
Class D Oxacillinases Resistance (OXA-23, OXA-72, OXA-40, OXA-48)	ABRX	Not Detected	Not Detected
Extended Spectrum Beta-lactamases	ABRX	Not Detected	Not Detected
Fluoroquinolones Resistance (QnrA, QnrB, QnrS)	ABRX	Not Detected	Not Detected
Macrolides Resistance	ABRX	Not Detected	Not Detected
Methicillin resistance (mecA)	ABRX	Not Detected	Not Detected
Minor Extended Spectrum Beta Lactamase Resistance	ABRX	Not Detected	Not Detected
Sulfonamide Resistance (dfrA1/A5)	ABRX	Not Detected	Not Detected
Tetracycline Resistance	ABRX	Not Detected	Not Detected
Vancomycin Resistance	ABRX	Not Detected	Not Detected
Acinetobacter baumannii	Bacteria	Not Detected	Not Detected
Bacteroides fragilis	Bacteria	Not Detected	Not Detected
Coagulase Negative Staph	Bacteria	Not Detected	Not Detected
Escherichia coli	Bacteria	Not Detected	Not Detected
Proteus vulgaris	Bacteria	Not Detected	Not Detected
Pseudomonas aeruginosa	Bacteria	Not Detected	Not Detected
Serratia marcescens	Bacteria	Not Detected	Not Detected
Campylobacter jejuni/coli	Bacterial	Not Detected	Not Detected
Clostridium difficile	Bacterial	Not Detected	Not Detected
E. coli EIEC	Bacterial	Not Detected	Not Detected
E. coli ETEC	Bacterial	Not Detected	Not Detected
E.coli EHEC	Bacterial	Not Detected	Not Detected
E.coli EPEC	Bacterial	Not Detected	Not Detected
E.coli STEC	Bacterial	Not Detected	Not Detected
Plesiomonas shigelloides	Bacterial	Not Detected	Not Detected
Salmonella enterica	Bacterial	Not Detected	Not Detected
Yersinia enterocolitica	Fungal	Not Detected	Not Detected
Dientamoeba fragilis	Parasite	Not Detected	Not Detected
Entamoeba histolytica	Parasite	Not Detected	Not Detected



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Targets Not Detected (continued)					
Target	Туре	Result	Estimated Microbial Load		
Giardia lamblia	Parasite	Not Detected	Not Detected		
Adenovirus 40/41	Viral	Not Detected	Not Detected		
Norovirus GI and GII	Viral	Not Detected	Not Detected		
Rotavirus A	Viral	Not Detected	Not Detected		
Rotavirus B	Viral	Not Detected	Not Detected		
Sapovirus	Viral	Not Detected	Not Detected		

## Methodology

Total nucleic acid extraction is performed using DNA MagMax MVPII Kits, which are validated by their manufacturer to yield isolated nucleic acids of sufficient quantity and quality from the relevant sample types. Presence of either pathogenic nucleic acids and/or genetic markers documented to confer resistance to antimicrobial compounds was determined by conducting RT-PCR reactions with primers designed to target species-specific (or marker-specific) genomic regions. RT-PCR reactions were either conducted in single-reaction wells, or through OpenArray methodologies. Bacterial and fungal targets may be reported semi-quantitatively with microbial load estimates calculated based on Crt comparisons with controls of known concentrations. All sample runs contain a minimum of one negative extraction control (NEC), one negative template control (NTC), and one positive control of known pathogenic/ABX marker composition (PTC). All RT-PCR reactions are conducted using TaqMan chemistry from Thermo Fisher. Nucleic acid-based pathogen detection is performed on the QuantStudio 12K platform. This platform was designed by Applied Biosystems, Inc. and utilizes quantitative real-time PCR in conjunction with fluorescently-labelled nucleic acid probes. A DETECTED result signifies that amplification of genus, species, or marker-specific (dependent on the analyte) genetic markers was observed, based on validated detection metrics.

## **Disclaimer and Limitations**

Nucleic acid-based pathogen detection (PD) is a laboratory-developed test (LDT) and as such, is not cleared by the FDA. Pathogen and antimicrobial marker screening at Lifetime Sciences does not screen for the presence of all pathogens documented to cause infections in the referenced tissues, nor every genetic markers documented to confer antimicrobial resistance. There may also be pathogens and resistance markers present that are not screened for nor previously documented. Nucleic acid-based pathogen detection analysis is intended to aid physicians in identifying underlying pathogens within a patient sample to help advise on possible treatment avenues. It should not be used in the contexts of diagnosis or supplant physician recommendations. These results should be interpreted along with clinical presentations and/or other laboratory results. These results and their clinical interpretations may not be accurate if the patient information/sample supplied is incomplete or inaccurate. If these results do not match clinical presentations, additional testing is recommended. The LDTs reported here were developed and had its performance metrics determined by Lifetime Sciences. Lifetime Sciences is certified under the Clinical Laboratory Improvements Act (CLIA) to perform high-complexity clinical laboratory testing. For other questions/concerns, please contact Lifetime Sciences.