

BactFast by Credence Genomics

BactFast by Credence Genomics is a single test that allows the identification of the entire population of known bacteria in one go, including species that are uncultivable. A diagnostic test which usually takes up to 7 days to process is now completed within 48 hours. BactFast replaces the entire cohort of conventional microbial and biochemical test methods and all of its drawbacks, generating highly transparent, accurate and more reliable data in rapid turn-around time with a minimum quantity of test sample.

BactFast for Healthcare and Industries

BactFast has already proven to be a life-saving approach in nosocomial infections in patients receiving intensive care. The test can be used to detect causative agents of infections and industrial contaminations across various sectors.

Healthcare

- Ventilator-Associated Pneumonia (VAP)
- Central Line Associated Bloodstream Infections (CLABSI)
- Catheter associated Urinary Tract Infections (UTI)
- Diabetic Ulcers
- Mixed Infections with unknown etiology

Industry

- Food & Beverages
- Agricultural products
- Dairy Products
- Pharmaceutical products
- Cosmetic & Personal care products
- Water/ Wastewater Treatment
- Soil Profile investigation
- Aviation fuel testing

Key points

- Allows Identification of Entire Spectrum of Known Bacteria in One Go
- Culture Independent – Ability to Identify Uncultivable Species
- Rapid Turnaround Time of Diagnostic Tests in 48 Hours
- Includes Advanced Analysis – Relative and Comparative Analysis
- 99% Accuracy, Highly Sensitive

WHY CHOOSE BACTFAST?

Feature	Conventional Technologies	BactFast
Turnaround time	7 – 10 days	48 hours
Accuracy level	~ 80 %	99.0 %
Accuracy of test	Operator-dependent; Non specific error prone results	Operator-independent; Highly accurate; Entirely reliable results
Throughput	Limited	Increased
Sensitivity	Varied	High
Contamination risk	Hindered by non-culturable organisms	Culture independent
Organisms per test	One organism per test; Important organisms can be missed	Entire spectrum of known bacteria; Entire population can be tested
Types of microbes detected	Limited to pathogens	All known organisms; Capable of advanced analysis (relative abundance, comparative abundance)

THE NEED FOR BETTER TESTING METHODS

In the past few decades, ignorance of the microbial abundance on earth was largely due to our inability to grow most of the microorganisms in a laboratory environment. Among the cultivable types of microorganisms, some were difficult to identify due to unusual biochemical reactions. Identification of microbes using conventional microbial techniques has always been cumbersome, time consuming and less accurate. When considering accuracy, conventional methods of detecting microbial species claim a 20% rate of error in results, which is unavoidable. As of late, DNA sequencing techniques have permitted the study of whole populations of microorganisms in a given environment without the need to culture any of them in a Petri dish.

BACTFAST ANALYSIS TYPES OFFERED



Detection

BactFast is capable of identifying and profiling the complete spectrum of known organisms in a single run and it requires only 48 hours of turnaround time. Additionally, the technique unveils the phylogenetic relationships of the detected organisms, providing you with enhanced analytical data.



Comparative Analysis

The test represents the fraction of each species of identified microorganisms in relation to the total microorganisms in the sample, addressing your customized research requirements. This exclusive feature was always beyond the boundaries with conventional techniques.



Relative Abundances

Another exclusive facility provided by BactFast: comparative measurements of microbial abundances under specific environmental and therapeutic conditions. This delivers accurate aspects to determine the efficacy of medical treatments, as patient samples can be checked before and after treatment.