microbial identification

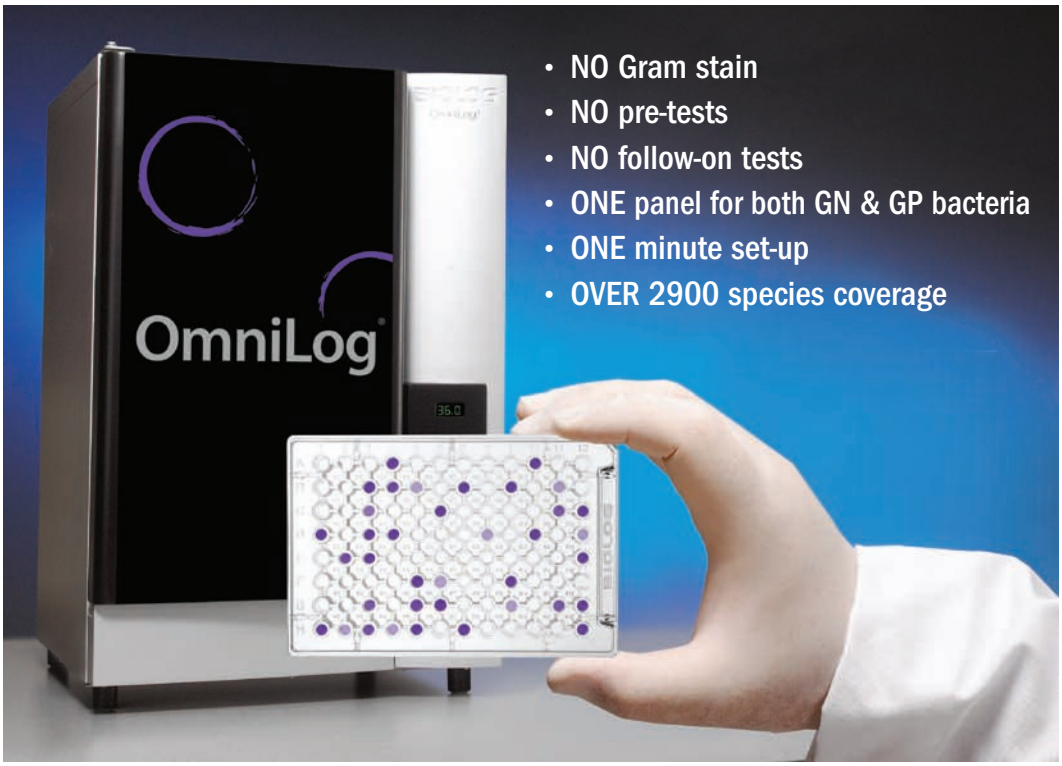
state-of-the-science performance with unmatched power & versatility

BIOLOG

(Microbial ID Products Not For Human *In Vitro* Diagnostic Use)

Revolutionary GEN III

microbial identification



Biolog's latest generation redox chemistry enables testing and identification of aerobic Gram-negative and Gram-positive bacteria in the same test panel. Gram stain and other pre-tests are no longer needed. A simple, one minute setup protocol is used for each sample. The expanded GEN III database is designed to meet the needs of Biolog's broad customer base covering diverse disciplines of microbiology.

All Biolog Microbial Identification Systems — manual, semi-automated or fully-automated — use the powerful GEN III MicroPlate™, allowing users to determine the most appropriate system to fit their current budget and level of throughput. Should needs change, all systems can be upgraded and expanded to meet new capacity requirements.

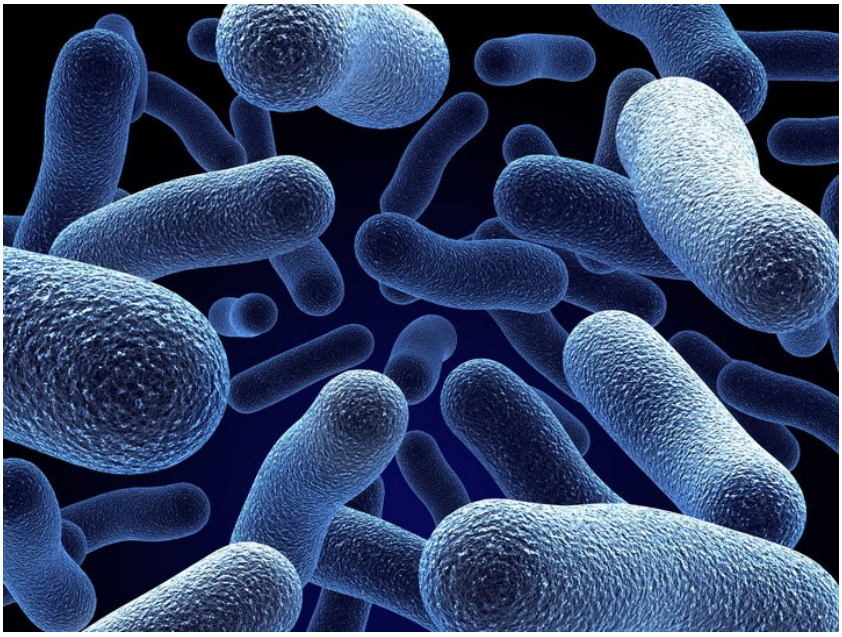
Biolog's single panel is easy to use, and identifies 4 times more species than alternative systems

BIOLOG

GEN III

3rd generation identification technology

with breakthrough advantages

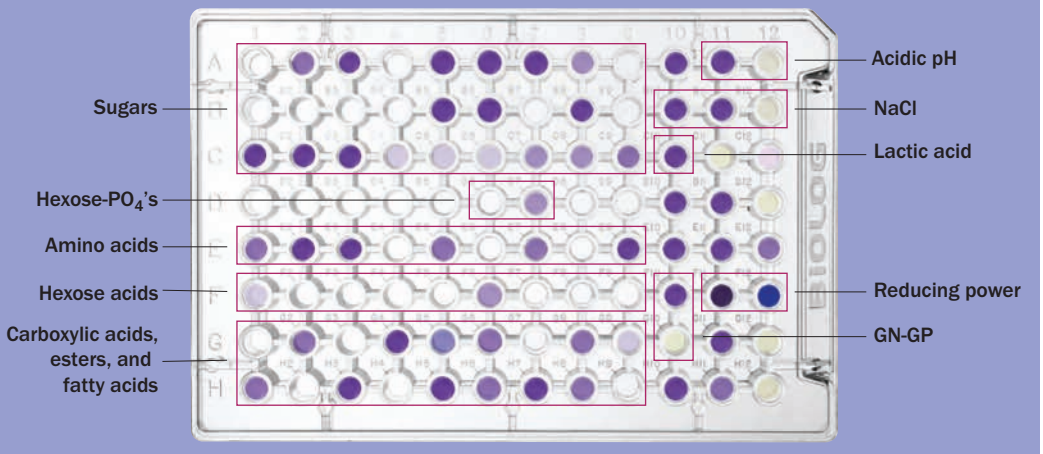


One technology with multiple platforms, for consistent performance across every level of your organization.

The GEN III redox chemistry is applicable to an unprecedented range of both Gram-negative and Gram-positive bacteria. GEN III dissects and analyzes the ability of the cell to metabolize all major classes of biochemicals, in addition to determining other important physiological properties such as pH, salt, and lactic acid tolerance, reducing power, and chemical sensitivity.

Anatomy of a GEN III identification.

ID = Stenotrophomonas maltophilia



71 Carbon Source *plus* 23 Chemical Sensitivity Assays

microbial identification

...with the OmniLog ID System

Biolog's powerful carbon source utilization technology accurately identifies environmental and pathogenic microorganisms by producing a characteristic pattern or "metabolic fingerprint" from discrete test reactions performed within a 96 well microplate. Culture suspensions are tested with a panel of pre-selected assays, then incubated, read and compared to extensive databases of environmental organisms, human pathogens, veterinary pathogens and plant pathogens. The scope of the 96 assay reactions, coupled with sophisticated interpretation software, delivers a high level of accuracy that is comparable to molecular methods. The one minute per sample set up is much simpler and faster than DNA sequencing and the automated pattern matching eliminates the need for training and expertise in gene sequence interpretation.

AUTOMATED

full automation to meet the demands of a dynamic workflow

The OmniLog® ID System offers a simple automated process to meet the dynamic workflow demands of a wide range of microbiology applications. Even organisms requiring special incubation temperatures or environments are easily accommodated, ensuring accurate identification for a broad spectrum of Gram-negative and Gram-positive bacteria.

The OmniLog ID System fully automates the process of microbial identification by incubating, reading and interpreting results from up to 50 Biolog MicroPlates™ at a time. The system software provides directives to guide all steps of the testing process for each MicroPlate, including sample placement and removal and extended incubation when needed. Additional MicroPlates can be loaded and processed any time there is an open tray or identification has been completed on a previously entered MicroPlate. Up to date information for each MicroPlate, including results as they become available, are continuously visible on the system's menu screen. Identifications take as little as 2 hours.

The OmniLog Plus ID System adds testing capabilities for anaerobic bacteria, yeasts, and filamentous fungi. Both OmniLog systems allow results to be saved to create a customized database or to track specific organism characteristics and frequency of isolation. The system software, which includes the RetroSpect™ software module for organism tracking and trending, is extremely easy to navigate, and provides all the required functionality to support 21CFR Part 11 electronic record requirements and regulatory compliance. Administrative features are also available to control operator access and the creation or modification of data files.

microbial identification

...with the MicroStation ID System

SEMI AUTOMATED

The MicroStation™ ID System is a versatile system, with the ability to identify and characterize a wide range of environmental and pathogenic organisms across diverse fields of microbiology. Using all Biolog databases, over 2650 species of bacteria, yeast and filamentous fungi can be identified. Some bacteria can be identified in as little as 2 hours. Just prepare a cell suspension and inoculate the appropriate MicroPlate.

After inoculation and incubation, the MicroPlate is placed into the MicroStation Reader for analysis. The unique metabolic pattern generated by the organism is recorded and compared to hundreds of identification profiles in a corresponding Biolog Database. The versatile plate reader uses dual wavelength readings to quantify color reactions in the MicroPlate wells, adding consistency and accuracy when reading the reaction patterns.

Biolog's patented redox chemistry makes use of different carbon compounds including sugars, carboxylic acids, amino acids and peptides to provide an unparalleled wealth of discriminating biochemical characterizations. This diverse set of tests enables our systems to identify microorganisms that other kit-based methods misidentify or fail to identify. The MicroStation System, as well as the OmniLog System, has extensive applications also for microbial community analysis in soil, water, biofilms and other environments.

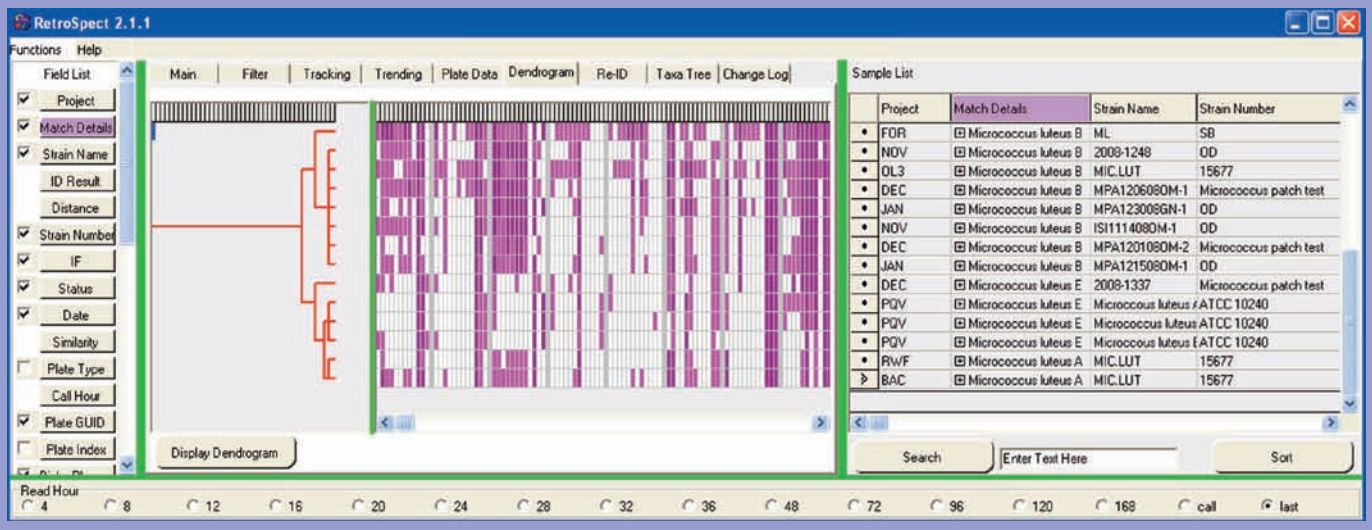
Over 2900 species of bacteria, yeast and filamentous fungi can be identified

unmatched versatility

that includes pragmatic tools

Building on Powerful Data

RetroSpect is a specialized software tool that supports data management and reporting and provides sophisticated trending and tracking of microbial data. Each Biolog MicroPlate provides an extensive data set of strain specific test information from each isolate. The new RetroSpect Software utilizes these data elements in a powerful analysis package. Data Management filters enable users to define the content of the databases and generate highly customized and informative reports.



Isolate

Prepare

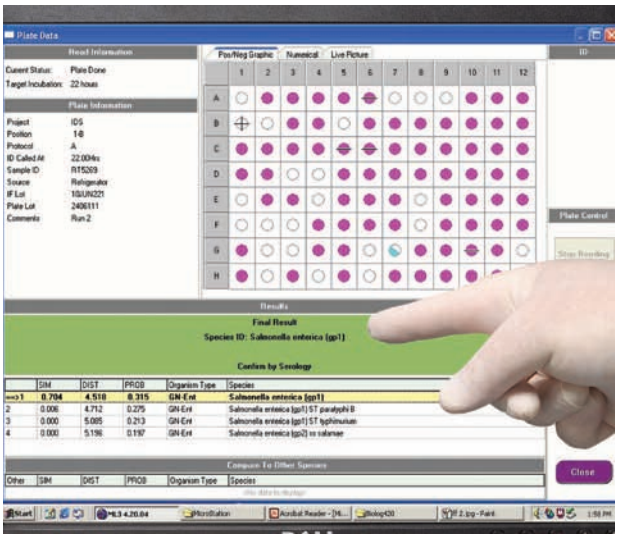
Inoculate

Incubate and Read

Rewarding our customers with innovation and greater performance for more than 30 years

microbial identification

with the MicroLog ID System



Accurate identifications in any setting.

Biolog's MicroLog® manual microbial ID system is the ideal choice for testing environments with lower volume requirements or budget constraints. The system offers basic identification capability for aerobic Gram-negative and Gram-positive bacteria. GEN III MicroPlate results are read visually and entered into the MicroLog Software's data entry screen for analysis and organism identification. This System includes a turbidimeter, the MicroLog software and electronic user guide. Databases, RetroSpect software and electronic pipettor are sold separately allowing users to customize the system to meet their organization's individual needs.

A simple, straightforward procedure.

1. Isolate a pure culture on agar media
2. Prepare inoculum at specified cell density
3. Inoculate the Biolog MicroPlate
4. Incubate the plate, observe and enter the reaction pattern to obtain ID result

Isolate

Prepare

Inoculate

Incubate and Read

Only Biolog technology provides users with both an identification AND a detailed strain characterization.

MANUAL