

Biolog for Microbial Mastery

Get relevant data you need faster with Odin

Introducing the Odin Family

The Odin[™] platform is the all-in-one solution for cellular metabolic characterization, growth kinetics, and identification. Efficiently phenotype your microbes by screening hundreds or even thousands of different substrates and growth conditions in a controlled environment. Load up to 50 plates on Odin L, or up to 8 plates on Odin VIII and walk away – Odin will dutifully measure plates at the right temperature and right time.

- Characterize microbial phenotypes
- Monitor growth curves
- Measure cell respiration kinetics
- Identify unknown microbes



Heroically Fast Characterization







Cellular phenotypes play a huge role in determining how efficiently a given microbe can achieve an outcome, from producing a drug product to fixing nitrogen in soil.

Genetic mutations are introduced over repeated passages and can fundamentally change growth profiles, production performance, and other traits. A microorganism may grow better at different temperatures or with different feed sources to understand it all is a mind-boggling exercise!

Odin enables you to efficiently characterize cell phenotypes. In conjunction with the Phenotype MicroArray[™] Microplates, microbes can be grown under a wide range of conditions, with data automatically captured to reflect growth and respiration.

ENVIRONMENTAL MONITORING

DRUG DISCOVERY AND DIAGNOSTICS

BASIC RESEARCH

BIOPROCESS AND FERMENTATION

MICROBIOME COMMUNITIES

Growth Measurement, on the Double

Odin has the capacity and control to efficiently perform phenotypic screening. Thousands of phenotypes around carbon, nitrogen, and phosphorous sources, as well as chemical, metal and environmental sensitivities can be tested in a single experiment.

Odin can see what's happening in two ways. To gain insight into cellular metabolism, it measures NADH production amplified by a reporter dye. If you're focused on cell growth, just leave the dye out and measure turbidity instead.

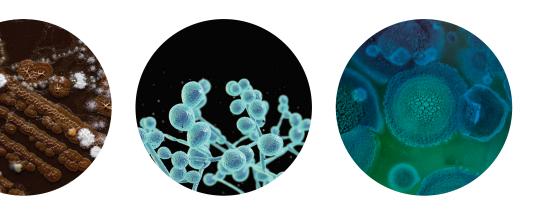
Comparing cell lines, understanding mutations, monitoring for phenotypic drift can all be done efficiently. Whether you care about microbes, mammalian cells, mitochondria, or microbial communities, there are panels suited to answer your burning phenotype questions.



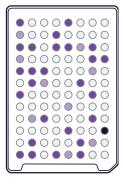
Automate Your Identification

Concerned about a contaminant, or don't know what's growing? For nearly 40 years, Biolog technology has been used for microbial identification. Using the same principle as the phenotype plates, a proprietary set of reagents are pre-arrayed on microplates and respiration is monitored over time.

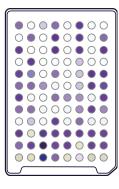
At every interval, Odin compares the metabolic fingerprint against its extensive database of over 2,900 organisms. It will stop the experiment when it has made a match. Now you can identify bacteria, anaerobes, yeast and filamentous fungi with a single instrument, with an optional 21 CFR Part 11 package to meet your regulatory needs.



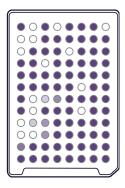
AN (Anaerobes)



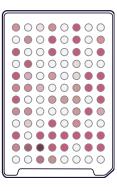
GEN III (Aerobes)



YT (Yeast)

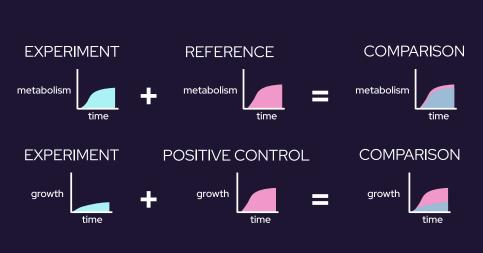


FF (Filamentous Fungi)



Odin for <u>All</u>

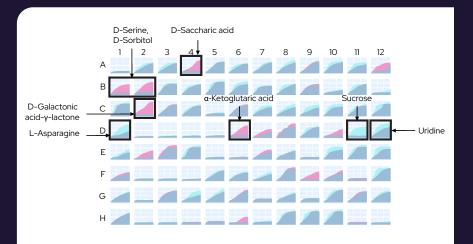
With a 50-plate capacity, Odin L has the flexibility to handle large experiments, multiple small experiments, and multiple operators at the same time. For labs with fewer users or lower throughput needs, Odin VIII offers the same powerful capabilities with a more compact 8-plate capacity. Experimental protocols and analysis tools are built into the software so you can focus on the results that matter most and quickly move on to the next steps of your research.



ODIN SEES WHAT IS HAPPENING IN TWO WAYS

It can measure a reporter dye to measure NADH production, effectively reporting the rate of metabolic respiration.

If you're focused on cell growth, just leave the dye out. Odin can also measure optical density (OD) to determine how quickly the cells are dividing. Taken together, you get a full picture of the best conditions for your microbes.



KINETIC METABOLIC CURVES, DEMONSTRATING VARYING CARBON SOURCE UTILIZATION

OD measurements representing metabolic activity are measured over time and compared to a reference or between strains.

Specifications



Choose your Odin

biolog.com/odin

	Odin VIII	Odin L
Dimensions	24.2 in x 21.0 in x 18.0 in (61.5 cm x 53.3 cm x 45.6 cm)	24.2 in x 21.0 x 33.1 in (61.5 cm x 53.3 cm x 84.2 cm)
Power	100 to 240 volts, 50/60 Hz	
Operating Temperature Range	18-28°C	
Incubation Temperature Range	22-45°C	
Temperature Consistency	±2 °C in the tray chamber	
Incubation Humidity Range	Ambient	
Test Capacity	8 microplates	50 microplates
Optical Density (OD) measurements at 2 wavelengths	490 nm or 590 nm, and 740 nm	
Temperature Control	Input of set temperature by external computer	
Temperature Indication	Output to external computer	Output to external computer and 7 segment display
Monitor	22 inch LCD flat panel	
Regulatory Options	21 CFR Part 11	

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Biolog for You

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