Biolog Solutions for Drug Discovery and Diagnostics

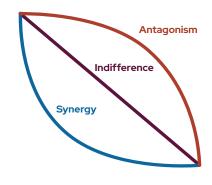
The Biolog platform provides a high-throughput screening method to improve the efficacy of phage therapy.



Odin

The Odin[™] system incubates and automatically monitors up to 50 microplates for high-throughput application needs.

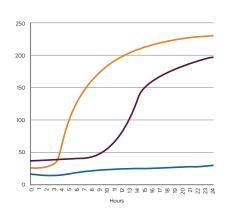
Comprehensive phenotypes are generated by automatic comparison and analysis of thousands of growth conditions in a single experiment.



Phenotype MicroArray™ Panels

Pre-plated panels provide a streamlined way to test metabolic and growth response of bacteria to thousands of conditions, including sensitivity to salt, pH, antibiotics and heavy metals.

Pre-selected conditions can also be tested in combination with a drug to assess interactions, like potential synergies or antagonistic effects.



Next-Level Phage Screening

By generating kinetic data against many conditions at once, Odin can screen for phage that result in complete killing (blue), are ineffective at killing (gold), and identify the emergence of resistance (red).



Rapidly screen for phage killing and resistance.

Biolog can help.

- Quickly home in on candidates that are most effective at killing bacteria
- Utilize our patented redox dye to monitor bacterial respiration and assess killing efficiency, or the emergence of resistance
- Automatically generate growth curves under many conditions at once, to analyze efficacy
 of phage in combination with other antimicrobials or inhibitors
- Monitor for specificity against specific bacteria to prevent off-target effects that could have detrimental effects on the microbiome

Engineered phage with antibacterial CRISPR-Cas selectively reduce *E. coli* burden in mice

GENCAY ET AL. 2023

Screened a library of engineered phage, and identified specific candidates effective against a diverse range of clinically relevant *E. coli* strains.

A candidate is currently in clinical development for treatment of fatal infections.

A Case of In Situ Phage
Therapy against
Staphylococcus aureus in a
Bone Allograft Polymicrobial
Biofilm Infection: Outcomes
and Phage-Antibiotic
Interactions

VAN NIEUWENHUYSE ET AL 2021

Determined the efficacy and specificity of phage therapy for a patient suffering from a chronic polymicrobial infection after tumor resection surgery. Phage targeting one of the four pathogens was administered together with intravenous antibiotics.

Phage Therapy for Limbthreatening Prosthetic Knee Klebsiella pneumoniae Infection: Case Report and In Vitro Characterization of Anti-biofilm Activity

CANO ET AL. 2021

Determined the biofilm activity of phage that was ultimately used to treat a patient suffering from antibiotic-resistant *klebsiella* infection.

SCAN TO READ THE FULL PUBLICATION







biolog

Biolog is a world leader in cell-based phenotypic testing technologies and assays. We have focused our efforts on developing technologies and products to test the properties of cells (phenotypes) very simply and efficiently.