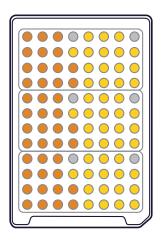
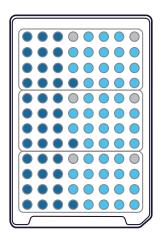
Biolog Solutions for Microbiome Analysis

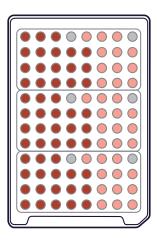
PreBioM plates offer a multidimensional phenotype profiling solution based on the impact of prebiotics on microbial function. The three-plate system contains **90** unique prebiotic substrates tailored to investigate the intricate interplay between prebiotics and the microbiome.



Mono/disaccharides PreBioM1



Poly/oligosaccharides PreBioM2



Fibers/food extracts PreBioM3

Each of the PreBioM plates stands alone as a comprehensive tool, containing a selection of prebiotic substrates in triplicate, ranging from simple sugars to dietary fibers. Using our Odin™ family of instruments, these plates allow you to kinetically characterize aerobic or anaerobic growth as the microbes selectively consume the prebiotic substrates. Alternatively, you can use a redox reporter dye to measure metabolic consumption to accurately profile the function of individual microbes or communities.







Microbiome communities



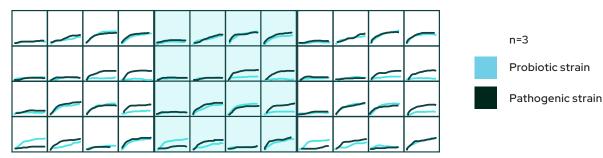
Prebiotics/ **Postbiotics**



Development

Key Applications

- PreBioM plates' versatile operation accommodates diverse aerobic or anaerobic microbes, enabling exploration of the gut microbiome.
- Mitigate the risk of phenotypic drift of production strains; use of these plates for QC ensures product consistency.
- Drive standardization of microbiome therapies, ensuring safety and efficacy.
- Optimize bioprocesses to produce synbiotics, probiotics, and postbiotics.
- Test interactions between microbiome community members.



Example use of PreBioM plates to identify substrates that can support better growth and metabolism of a prebiotic strain compared to a pathogenic strain. Kinetic characterization of the plates on Odin provides metabolic rate, lag phase time, log phase duration, and more.



PreBioM + Odin

The plates offer key advantages when used in conjunction with the Odin family of instruments and Odin software.

- Kinetic data can be obtained for the entire incubation period, regardless of whether the conditions are aerobic or anaerobic.
- Increased throughput, especially when working with multiple isolates, samples, or conditions.
- Odin software knows what substrates are found in each well, and saves you time by generating streamlined reports.
- Odin software offers Community Analysis features for advanced data analysis to study the diversity of a community, and how it changes over time or under different conditions.

biolog