APPLICATIONS

GET MORE, SAVE MORE



INHIBITION ASSAYS

Antimicrobials, biopesticides development

Why choose MilliDrop?

- → Small sample volume
- --- Large number of samples and conditions in parallel
- --- Single reactor sorting and characterization



STRAINS & CULTURE MEDIA OPTIMIZATION Synthetic biology & bioprocesses development

Why choose MilliDrop?

- ---- Technical replicates
- --- Quick detection
- --- Large amount of data from a single experiment



COMPLEX COMMUNITIES ANALYSIS Microbiota-based product development

Why choose MilliDrop?

- --- Single cell inoculum
- --- Kinetic measurements
- --- Benchtop instrument



ISOLATION & ENRICHMENT

Microbials development from natural samples

Why choose MilliDrop?

- → Single cell inoculum
- ---- Quick detection
- → Benchtop instrument

CONTACT

contact@millidrop.com

www.linkedin.com/company/10428627/ https://twitter.com/MilliDrop www.millidrop.com



>2000 INDEPENDENT REACTORS AUTOMATED

MINIATURIZED

FAST, RELIABLE, HIGH THROUGHPUT CELL ANALYSIS AND CULTIVATION





4 IN 1: PREPARE, INCUBATE, MEASURE AND SORT



GENERATION

- Up to 764 different conditions
- → Up to 10 technical replicates
- ---- Small sample volume required
- ---- Short hands-on time





INCUBATION

- ---- Homogeneous growth conditions
- --- No evaporation
- → Temperature range from 15 to 50°C



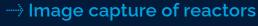






MEASUREMENT

- -> 2000 isolated reactors measured independently
- --- Early detection
- Kinetic measurement of 4 fluorescence channels& 1 biomass channel









SORTING

- ightharpoonup Identify the most interesting reactors
- Dispense the reactors of interest in a 96 well plates
- Sorted reactors ready for DNA/RNA extraction









Screen more conditions in less time	
ast detection	
Small sample volume	
All in one: generation, incubation, detection and sorting $oxdot$	
Measure 2000 reactors in 30 minutes	
Sort reactors of interest	

GET MORE & SAVE MORE

- Get thousands of experiments in just one run
- ---- Get thousands of kinetic curves in just one experiment
- -> Screen hundreds of different conditions in parallel
- -> Save time and consumables
- --- Reduce costs and wastes

TECHNOLOGICAL BREAKTHROUGH

The MilliDrop Analyzer produces 10 technical replicates of each sample and stores them as isolated mm-scale droplets in a capillary: thousands of microreactors in one experiment. The reactors are then incubated at the user defined temperature between 15 and 50°C. Each replicate of each sample is independently monitored each 20 minutes to determine the kinetic curves on 4 fluorescence channels and 1 biomass channel. The small reactors volume allows for early detection of microbial growth and precise determination of kinetic curves. The MilliDrop technology guarantees the absence of evaporation, while reactors separation prevents cross-contamination. Experimental data are readily available at any time to get results faster. At the end of the experiment, the reactors of interest, are sorted in the output plate by the MilliDrop Analyzer.