

IncuCyte® S3 Cell-by-Cell Analysis

Answer more questions about your heterogeneous cell models with IncuCyte S3's Cell-by-Cell Analysis

The IncuCyte® S3 Live-Cell Analysis System, Cell-by-Cell Analysis Software Module, and IncuCyte Reagents provide a new, enabling, end-to-end solution for analyzing heterogeneous cultures with microplate throughput.

Perform label-free cell counts and subsequent cell-by-cell classification of adherent or non-adherent cell models based on shape, size or fluorescence intensity to quantify dynamic changes in subpopulations within a mixed culture, opening a new world of discovery.

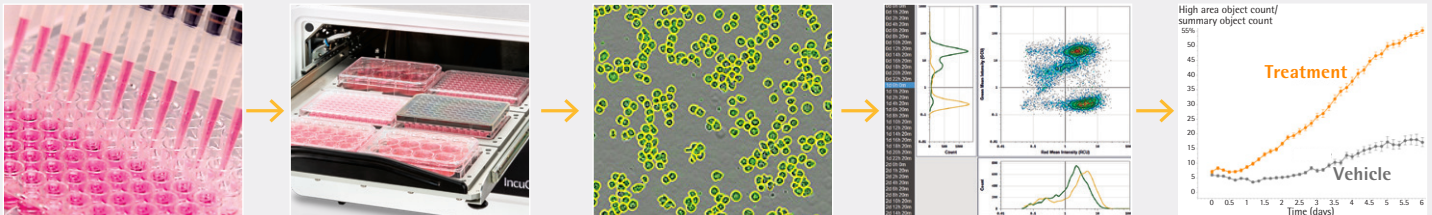


With the IncuCyte® Cell-by-Cell Analysis, you can...

- Study dynamic changes during activation or differentiation.
- Perform kinetic phenotyping in mixed cultures.
- Uncover cell-specific cytotoxic treatment effects on health.
- Complement your existing workflows.

Study dynamic changes in cell subpopulations.

Identification, classification, and analysis of subsets of cells is easily accomplished with a suite of purpose-built software tools and guided workflow.

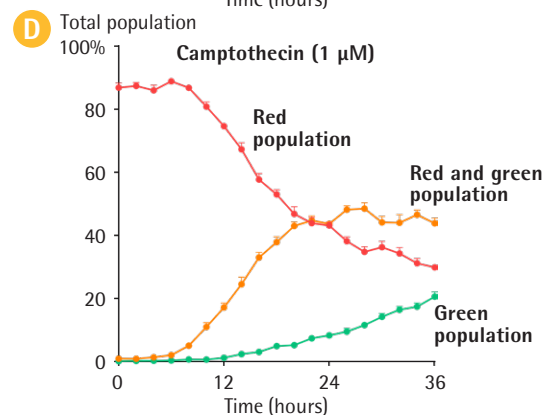
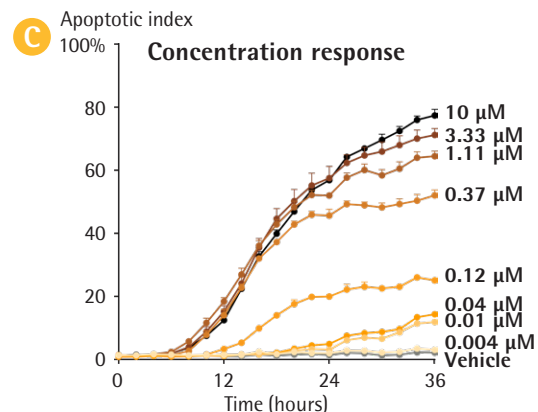
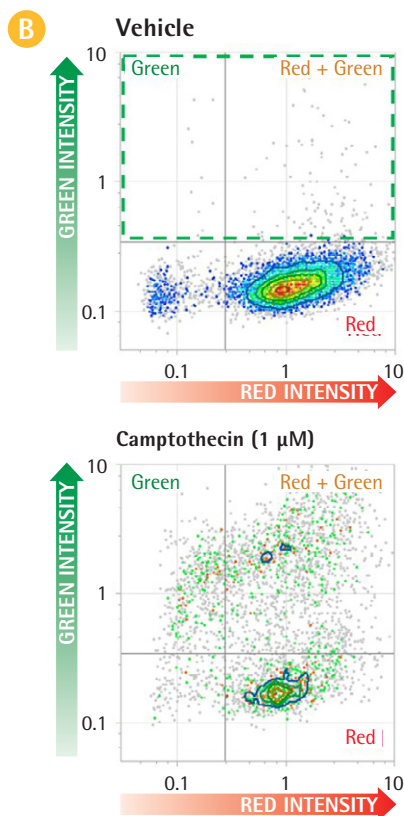
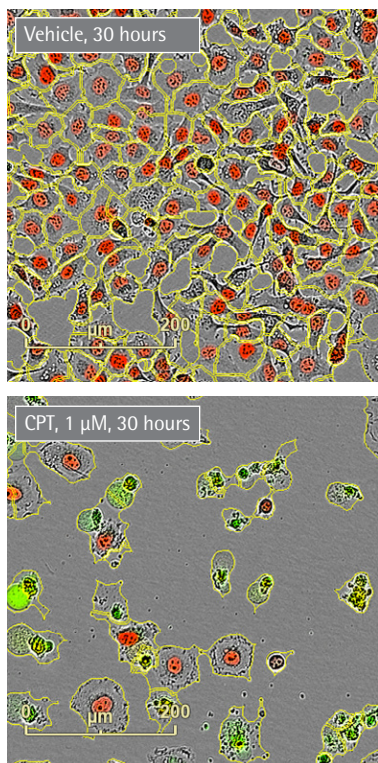


- 1 Prepare assay plate**
Leverage propriety non-perturbing reagents and protocols. Enable multiplexed analysis in living cells.
- 2 Acquire images**
Maintain the field of view while keeping cells stationary during imaging, leveraging IncuCyte's mobile optical train.
- 3 Identify objects**
Identify individual cells in HD phase for label-free quantification of the total cell population.
- 4 Measure and classify**
Group cells into subsets using size, shape or fluorescence intensity, and link subset phenotype to function or health.
- 5 Visualize data**
Verify and graph changes in subsets over time.

Utilize the IncuCyte® S3 Cell-by-Cell Analysis Software Module to enable a range of applications.

Visualize and quantify dynamic, phenotypic and morphological changes of cell subsets over time to quantify the process and effects of cellular heterogeneity. Gain new insights into activation or differentiation, or understand how cell subsets respond to treatment.

A HT 1080 NucRed cells



Time course of apoptotic index following Camptothecin (CPT) treatment. Cell health was determined with multiplexed readouts of IncuCyte® NuLight Red (nuclear viability marker) and non-perturbing IncuCyte® Caspase 3/7 Green Reagent (apoptotic indicator) following CPT treatment (A). Cell subsets were classified using IncuCyte® Cell-by-Cell Analysis Software tools (B). Control cells exhibiting red fluorescence are suggestive of healthy cells (top panel B), while cells after CPT treatment yield populations with both red and green fluorescence indicating early apoptosis, as well as those with only green fluorescence indicating late apoptosis (lower panel B). Concentration response time courses of apoptotic index are shown (percentage of total cells exhibiting green fluorescence – C), as well as the time course of the changing subpopulations after CPT treatment (D).

To place an order or receive technical assistance

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IncuCyte®

A SARTORIUS BRAND

www.incucyte.com

Ordering information and related products

Product	Quantity	Cat. No.
IncuCyte® S3 Cell-by-Cell Analysis Software Module	1 module	9600-0031
IncuCyte® S3 Live-cell Analysis System	1 instrument	4637
IncuCyte® Mouse IgG1 FabFluor-488 Antibody Labeling Reagent	1 vial (50 μg)	4745
IncuCyte® Mouse IgG2a FabFluor-488 Antibody Labeling Reagent	1 vial (50 μg)	4743
IncuCyte® Mouse IgG2b FabFluor-488 Antibody Labeling Reagent	1 vial (50 μg)	4744
IncuCyte® Annexin V Red Reagent for Apoptosis	1 vial	4641
IncuCyte® Annexin V Green Reagent for Apoptosis	1 vial	4642
IncuCyte® Caspase 3/7 Green Reagent for Apoptosis	20 μl	4440
IncuCyte® Caspase 3/7 Red Reagent for Apoptosis	20 μl	4704
IncuCyte® Cytotox Red Reagent for counting dead cells	5 μl x 5	4632
IncuCyte® Cytotox Green Reagent for counting dead cells	5 μl x 5	4633
IncuCyte® NuLight Red Lentivirus Reagent (EF-1 α, Puro) for nuclear labeling	0.2 mL	4625
IncuCyte® NuLight Green Lentivirus Reagent (EF-1 α, Puro) for nuclear labeling	0.2 mL	4624

Visit www.essenbioscience.com/cell-by-cell to see more applications of IncuCyte® S3's Cell-by-Cell Analysis.