



Incucyte[®]

Empower Live-Cell Analysis
Inside Your Incubator

Simplifying Progress

SARTORIUS

Innovation Never Takes a Break

Analyze your cells for days, weeks or even months as they sit stationary in the stable environment of your tissue culture incubator. With Incucyte's user-friendly interface and robust instrument portfolio, any cell biologist can gain dynamic insights into the health, morphology, movement and function of their cell models.



Ask new questions

- Explore both routine and complex questions with a single flexible platform.
- Devise new experiments with up to five live-cell fluorescence channels plus HD phase imaging.



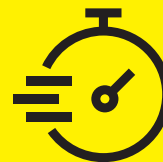
Protect Your Cells

- Leave cells undisturbed and stationary in the incubator during analysis.
- Maintain cell health and reduce artifacts with specially-formulated live-cell reagents or label-free assays.



Get New Answers

- Never miss a data point with real-time continuous analysis.
- Profile cell type-specific and time-dependent biological activity.



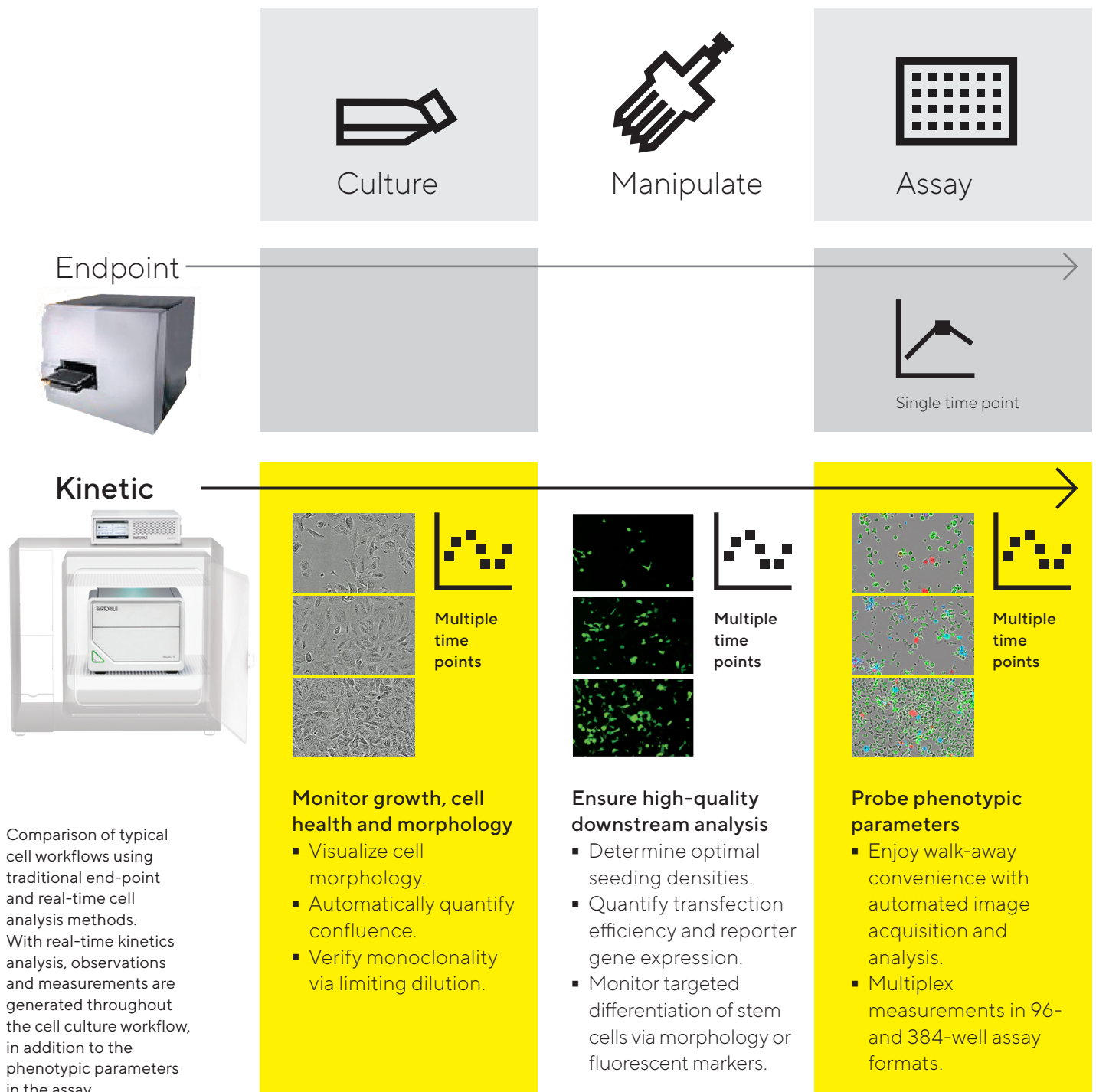
Improve Productivity

- Accommodate multiple users and applications in up to six microplates in parallel.
- View experiments live from any networked PC, with unlimited user licenses.



Insight and Accuracy at Every Step

Whether you simply want to improve experimental outcomes with enhanced cell culture quality control, or study complex cell-cell interactions, the Incucyte can meet your needs. Seamlessly transition from one step in your workflow to the next with interchangeable trays to support tissue culture flasks, dishes, or multi-well plates.



Push the Boundaries of Research and Development

Incucyte's suite of applications can fast-track your next discovery. Rapidly generate new insights with a system designed for a range of cell types – from proliferating tumor cells to non-adherent immune cells to sensitive primary cells. Incucyte's design features a fixed sample stage and uninterrupted incubation for minimal disturbance to precious cells.

Research Areas



Find reagents and consumables to support these applications via the QR code or at [sartorius.com/incucyte-shop](https://www.sartorius.com/incucyte-shop)

Cell Health and Proliferation

- Cell counting/proliferation
- Viability (AI Cell Health)
- Apoptosis
- Cytotoxicity
- Cell Cycle
- ATP Metabolism
- Mitochondrial Membrane Potential

Cell Function

- Immune Cell Killing
- Antibody Internalization
- Phagocytosis
- NETosis
- Neuronal Activity
- Kinase Akt Activity
- Live-Cell Immunocytochemistry

Cell Movement and Morphology

- Scratch Wound Migration & Invasion
- Chemotaxis Migration & Invasion
- Immune Cell Activation
- Neurite Outgrowth
- Morphological Analysis

Assays for 3D Models

- Spheroid Growth
- Spheroid Invasion
- Organoid Assay

Cell Monitoring

- Cell Culture QC
- Organoid Culture QC
- EV Uptake Assay

Around-the-Clock Analysis

With Incucyte's Powerful, Automated Workflow, Research Continues Day and Night.

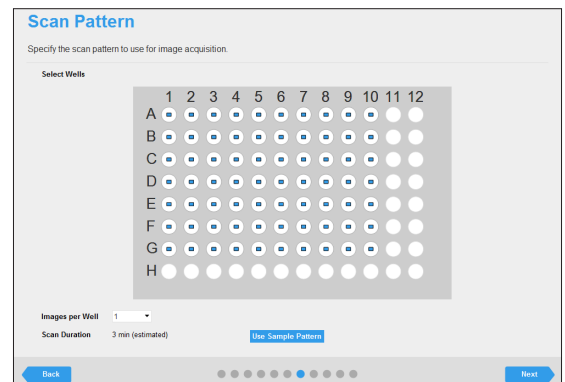
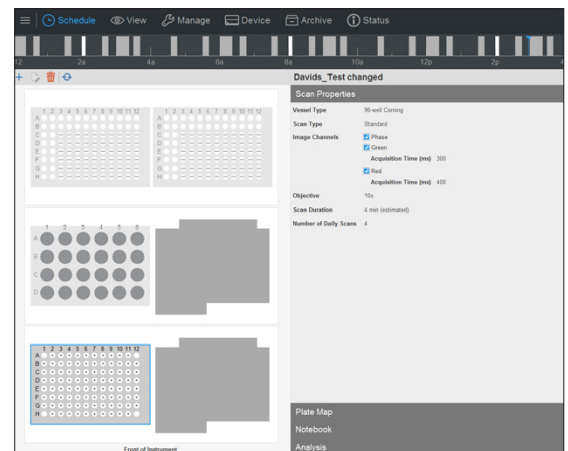



1. Simple, Flexible Sample Prep

- Streamline assay prep with optimized lab-tested protocols.
- Reduce artifacts with Incucyte's non-perturbing live-cell reagents.

2. Set up and Walk Away

- User-friendly, guided experimental setup.
- Compatible with over 700 vessels.



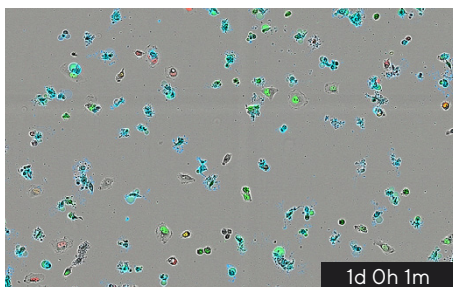
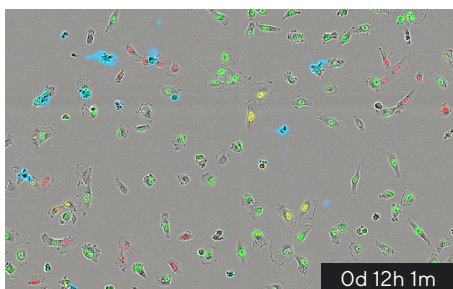
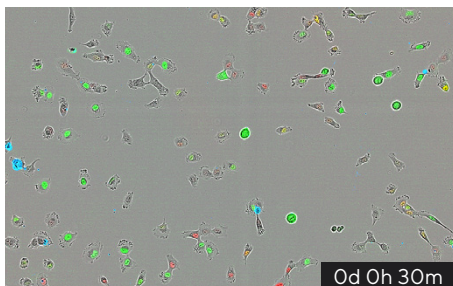
 Find out more
For more information, please visit
sartorius.com/incucyte

Guided interface enables rapid experimental set up, even for first time users.



3. Acquire and View Images Over Time

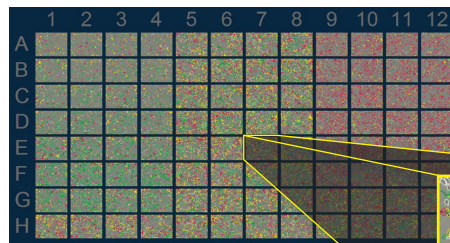
- Choose from up to five fluorescence channels combined with HD phase.
- Vessel View for quick visual survey of results.



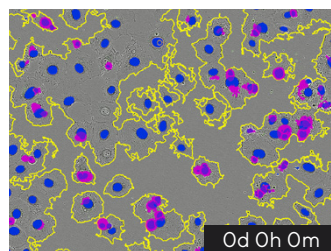
Automatically acquire images over time.

4. Analyze in Real Time

- Efficient and reproducible image analysis.
- Powerful visualization of images and kinetic measurements, including IC_{50} .
- Monitor your work from anywhere with secure remote software access.

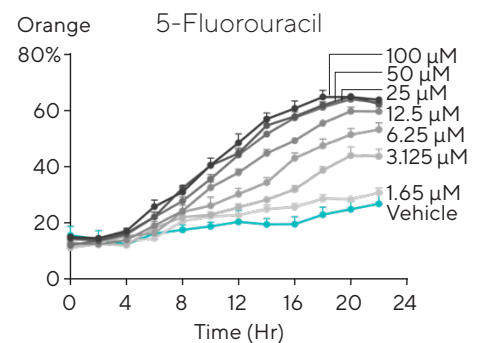
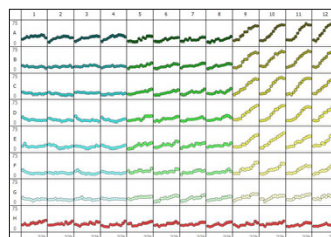


Use Incucyte® Vessel View to review images of all locations in the vessel at once and quickly assess experimental results, plus zoom in on images of interest.



Automatically identify regions of interest via masks.

HT 1080 Cells in G1 (Orange)
Percent of Total Cells Over 24 Hrs



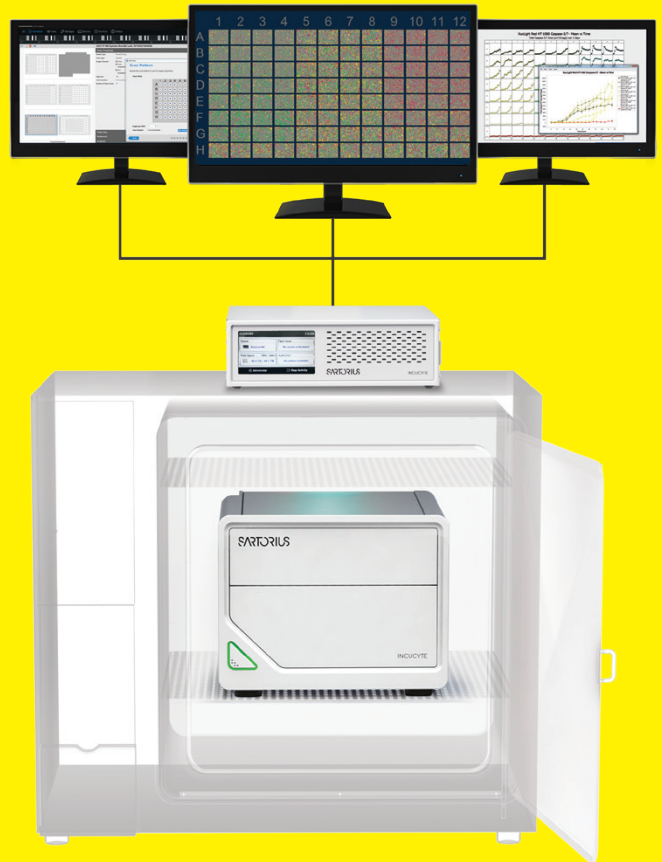
Generate presentation-ready timelapse graphs.

View all 96- or 384-well kinetic trends at once with Incucyte® Plate Graph and export data to calculate EC_{50} or IC_{50} response values.

Incucyte[®] System Portfolio

A Range of Systems to Meet Varied Needs and Budgets

From our workhorse, the Incucyte S3, to our economical SX1, to the newest member, the frontier-breaking SX5, we deliver meaningful insights to simplify progress for labs of any size.



Support an entire research team via concurrent, remote network access.
Make more informed decisions from the comfort of your office or home.



Incucyte[®] SX5

Leading the Way With Living Cells.

More Colors.
More Insights.
More Possibilities.

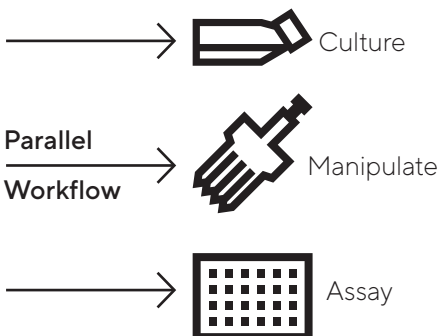
Harness the power of flexible live-cell analysis

See more information in every sample and explore more applications. Leverage up to 5 different fluorescence channels, up to 3 at a time, for long term time-lapse experiments. Study complex immune-tumor cell interactions, synaptic activity in neuronal co-cultures, metabolism in cancer cells, and much more – with a single platform.

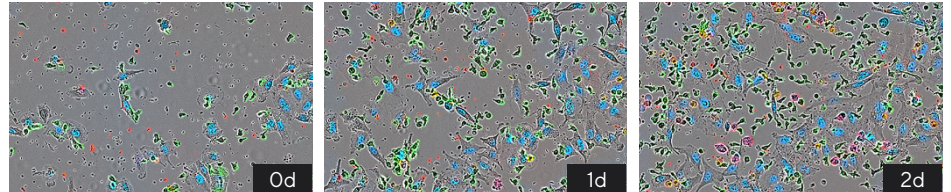
Our new 3-color, patent-pending optical module includes a long wavelength, low phototoxicity NIR channel and optimized reagents for turnkey 3-color applications.

Key Features

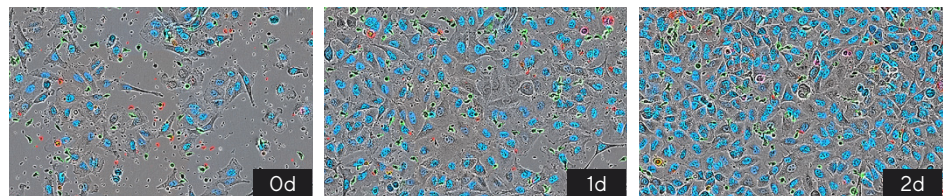
- Our most advanced application offering.
- Multi-user support.
- Up to 5 different fluorescent channels, up to 3 simultaneously.
- 4x, 10x, 20x objectives on an automated turret.
- Support for 3 interchangeable vessel trays and over 700 vessels, up to 6 microplates in parallel.



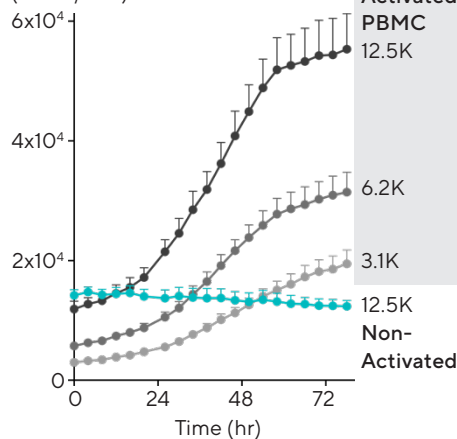
Activated PBMC



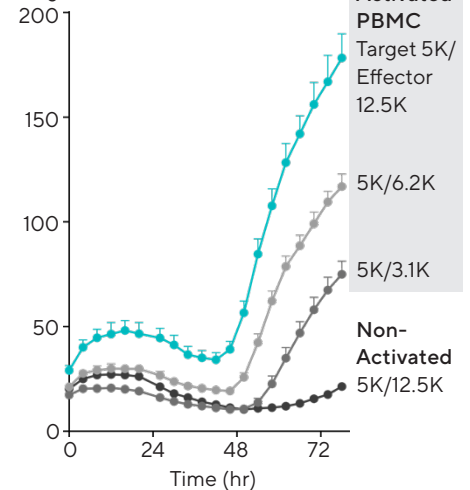
Non-activated PBMC



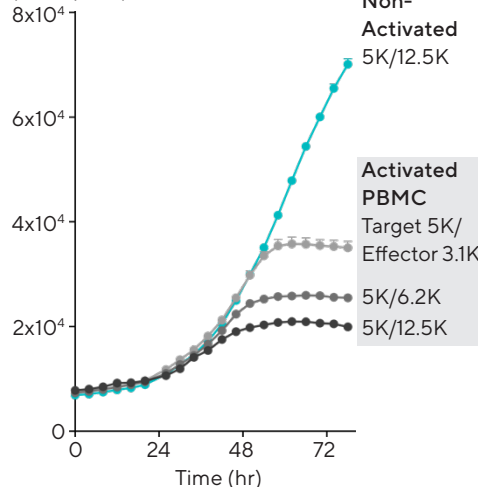
Total Effector Cell (count/well)



Target Apoptosis/ Target Cell Number



NIR Nuclei (count/well)



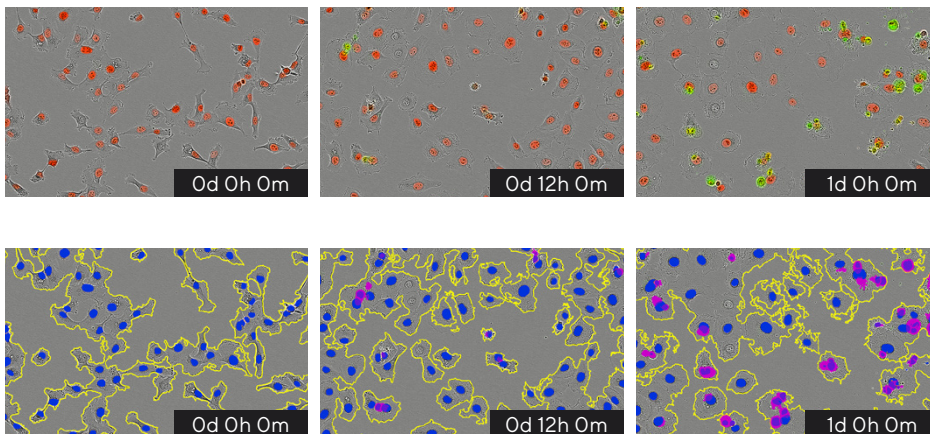
Find out more
For more information, please visit sartorius.com/Incucyte

Incucyte[®] S3

See What Your Cells Are Doing
and When They Do It.

Our flexible assay platform sits inside a standard tissue culture incubator, analyzing even the most sensitive living cells, around the clock, for days, weeks, or months.

This workhorse can support your team throughout the cell culture workflow, from cell culture QC, to cell manipulation, to microplate assays. Plus all users can remotely view experiments as they unfold.



Key Features

- Robust application suite.
- Multi-user support.
- Two-color Red/Green OR Orange/NIR fluorescence plus HD Phase imaging.
- 4x, 10x, 20x objectives on an automated turret.
- Support for 3 interchangeable vessel trays and over 700 vessels, up to 6 microplates in parallel.



Culture

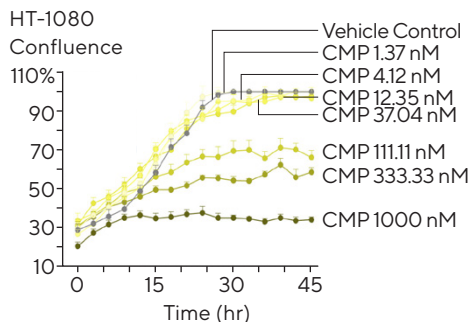


Parallel
Workflow
Manipulate

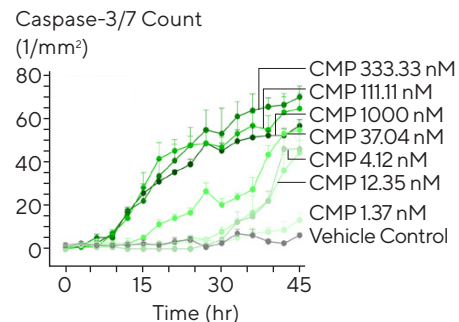


Assay

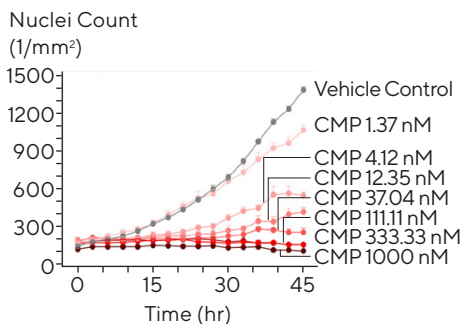
Label-free Confluence




Incucyte Caspase-3/7 Apoptosis



NucLight Red Lenti Nuclei Counts

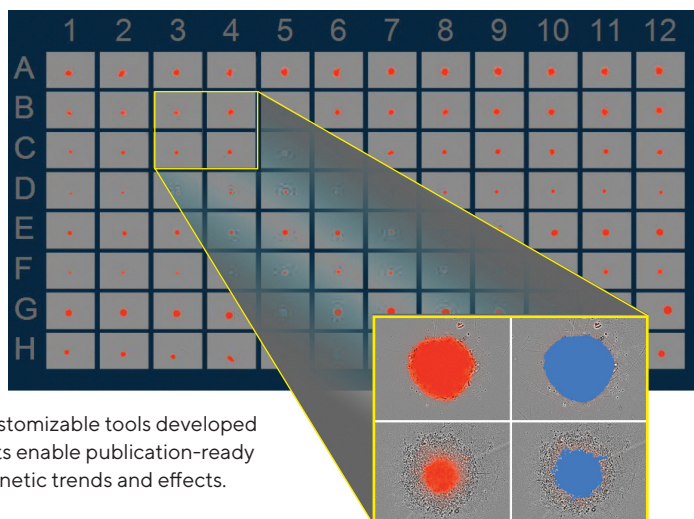


 Find out more
For more information, please visit
sartorius.com/Incucyte

Incucyte[®] SX1

An Economical Choice
for Live-Cell Analysis.

Designed with the small lab in mind, the Incucyte SX1 empowers your cell culture workflow. Never miss important insights again. Seamlessly transition from cell culture QC to assay with interchangeable trays for tissue culture flasks, dishes, or multi-well plates.



Flexible, customizable tools developed for biologists enable publication-ready graphs of kinetic trends and effects.

Key Features

- Robust application suite.
- Two-color Red/Green fluorescence plus HD Phase imaging.
- 4x, 10x, or 20x objectives, single position use.
- Interchangeable tray to support over 700 vessels, up to 2 microplates in parallel.

Serial Workflow



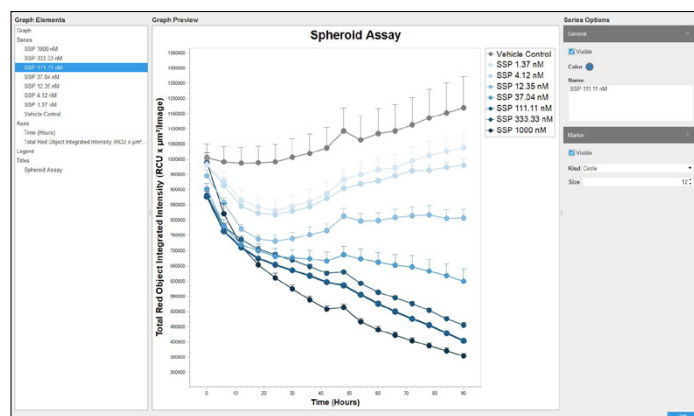
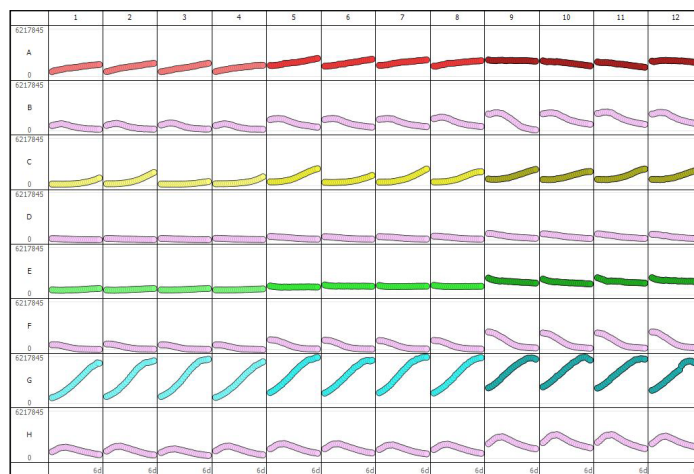
Culture

Manipulate

Assay

Incucyte Spheroid Assay Analysis

Total Red Object Integrated Intensity (RCU x μm^2 /Image)



Incucyte[®] Ordering Information

Live-Cell Analysis Systems & Accessories

Product	Description	Cat. No.
All Incucyte[®] Live Cell Analysis Systems include:	<ul style="list-style-type: none"> Unlimited software licenses for standard acquisition and basic analyzer (additional modules are required for certain applications). One year manufacturer's software and service warranty. Onsite installation and training. 	
Incucyte [®] SX5 Live-Cell Analysis System*	Includes image acquisition and analysis system with: <ul style="list-style-type: none"> HD Phase/Green/Orange/Near IR Optical Module. 4x, 10x, and 20x objectives on an automated turret. Controller with 27TB storage. 	4816
Incucyte [®] S3 Live-Cell Analysis System	Includes image acquisition and analysis system with: <ul style="list-style-type: none"> HD Phase/Green/Red Optical Module. 4x, 10x, and 20x objectives on an automated turret. Controller with 16 TB storage. 	4647
Incucyte [®] SX1 Live-Cell Analysis System	Includes image acquisition and analysis system with: <ul style="list-style-type: none"> HD Phase/Green/Red Optical Module. Controller with 16 TB storage. Minimum of one objective and one tray must be purchased separately. 	4788
Incustore [®] Storage Unit	<ul style="list-style-type: none"> Additional 33 TB storage for Incucyte SX5, S3 or SX1 	4689
Incucyte [®] GPU (Graphics Processing Unit)	<ul style="list-style-type: none"> The Incucyte[®] AI Cell Health Software Module utilizes a Graphics Processing Unit (GPU) co-processor, 2- to 4-fold improvement in the processing times. Installed as a drop-in hardware upgrade to the controller (2022B software version or higher). 	BA-04870

* additional optical modules available, please contact your technical sales specialist

Software Modules

Product	Description	Cat. No.
Incucyte [®] AI Cell Health Software Module	Simplify the complexity of classifying live versus dead cells using artificial intelligence (AI)-driven image analysis - with no need for labels. (requires a GPU co-processor (BA-04870) and 2022B or higher software version).	BA-04871
Incucyte [®] Cell-by-Cell Software Module	Perform label-free cell counts and subsequent classification and analysis of cell subsets over time.	9600-0031
Incucyte [®] Advanced Label-Free Classification Software Module	Monitor cell morphology changes and determine live/dead cell counts or classify cells based on morphology via label-free multivariate analysis. (Module requires Incucyte [®] Cell-By-Cell Analysis Software Module (Cat. No. 9600-0031))	BA-04867
Incucyte [®] Spheroid Software Module	Quantify spheroid growth, health, and invasion over time.	9600-0019
Incucyte [®] Organoid Software Module	Quantify label-free differentiation and maturation of organoid cultures or assess treatment effects on organoid growth.	9600-0034
Incucyte [®] Scratch Wound Software Module	Quantify cell movement into cell-free zones (requires Woundmaker and Imagemock plates).	9600-0012
Incucyte [®] Chemotaxis Software Module	Quantify the dynamics of chemotactic migration (requires Clearview [™] Chemotaxis plates).	9600-0015
Incucyte [®] Neurotrack Software Module	Quantify the dynamics of neurite outgrowth.	9600-0010
Incucyte [®] Neuronal Activity Software Module	Quantify the dynamics of neuronal activity.	9600-0032
Incucyte [®] ATP Software Module	Quantify cell type-specific ATP content over time.	9600-0033
Incucyte [®] 21 CFR Part 11 Software Module	Secure and configurable software module to track all system events and user actions.	BA-04876
Incucyte [®] Angiogenesis Software Module	Quantify the dynamics of tube formation during angiogenesis.	9600-0011

Harness the power of live-cell analysis with a full range of Incucyte reagents and consumables to revolutionize the way you quantify cell behavior. To view a complete listing of our reagents and consumables visit: [sartorius.com/incucyte-shop](https://www.sartorius.com/incucyte-shop)



C50029
Status: Drawer Open
Next Scan: 3 minute scan @ 16:32 [42 minutes]
Free Space: 16.4 TB / 16.4 TB
Filter: Color
Last Scan: No status available
Administer Stop Activity

INCUCYTE S3

ESSEN
BioScience

SARTORIUS

CAUTION

Sales and Service Contacts

For further contacts, visit

[sartorius.com/live-cell-analysis](https://www.sartorius.com/live-cell-analysis)



Sartorius | Göttingen | Facebook



LinkedIn for Incucyte on Sartorius

North America

Phone: +1 734 769 1600, ext. 1

E-Mail: ips.opm.na@sartorius.com

Europe

Phone +44 (0) 1763 227400

E-Mail: orderhandling.ips.ne@sartorius.com

Asia Pacific

Phone +65 6872 3966

E-Mail: sartoriusap@sartorius.com

Specifications subject to change without notice.

©2024. All rights reserved. All names of Sartorius products are registered trademarks and the property of Sartorius AG and/or one of its affiliated companies. Incucyte-Live-Cell-Analysis-Systems-Brochure-en-L-Sartorius
Status: 02 | 2024