Incucyte® Cell-by-Cell and Advanced Label-Free Morphological Analysis
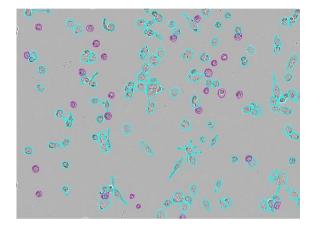
Achieve Precise, Unbiased Measurements of Your Heterogenous Cell Models
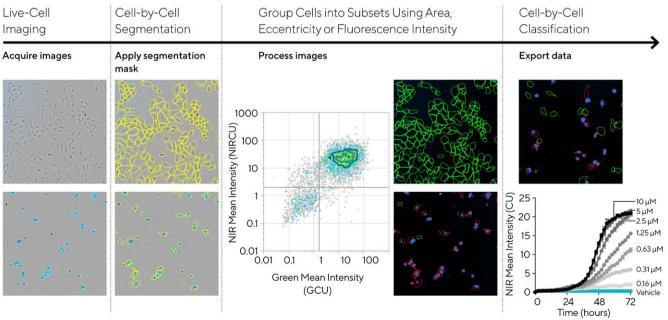
With the Incucyte® Morphological Analysis, You Can:

- Use objective analysis to study dynamic changes in cell subpopulations
- Perform kinetic phenotyping in mixed cultures
- Uncover cell-specific cytotoxic treatment effects on health
- Monitor adherent cell morphology changes via automated, label-free multivariate analysis

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

Incucyte® Cell-by-Cell Analysis Workflow

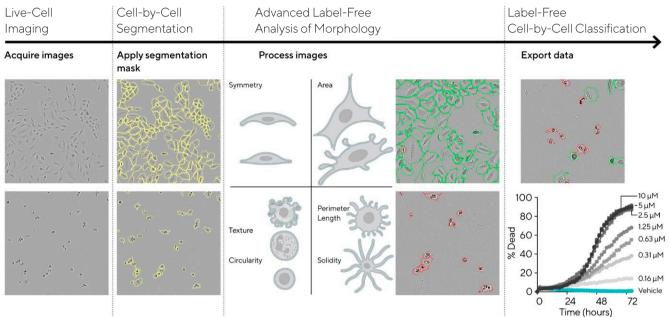| Live-Cell Imaging	Cell-by-Cell Segmentation	Group Cells into Subsets Using Area, Eccentricity or Fluorescence Intensity	Cell-by-Cell Classification
Acquire images	Apply segmentation mask	Process images	Export data

Workflow indicates typical steps taken for use of the Incucyte® Cell-by-Cell Analysis Software Module to segment individual cells and classify population subsets using area, eccentricity, or fluorescence intensity of labeled cells. Incucyte® Annexin V NIR reagent was used to detect total dead cell number in the presence of compound treatment over time. Additional functionality using total cell morphology can be accomplished using the Advanced Label-Free Classification Analysis Software Module.

Find out more: Cell-by-Cell Analysis - Incucyte® Live-Cell Assays and Applications | Quantify Cell Proliferation

The Incucyte® Advanced Label-Free Classification Analysis Software Module add-on for the Incucyte® Cell-by-Cell Analysis Software Module enables automated, continuous interrogation of adherent cell morphology changes in physiologically relevant conditions to track biological changes using advanced machine learning algorithms—opening up new possibilities in comparison of test results across experiments to:

▪ Improve biological insights using integrated image acquisition, and analysis to identify live vs. dead, or state of differentiation—*no labeling required!*
▪ Perform unbiased analysis of cell morphology
▪ Conduct label-free phenotypic screening

Capturing data-rich information, classification of cell differentiation or identification of live vs. dead without fluorescence has never been easier!

Incucyte® Advanced Label-Free Classification Analysis Workflow

Live-Cell Imaging	Cell-by-Cell Segmentation	Advanced Label-Free Analysis of Morphology	Label-Free Cell-by-Cell Classification
Acquire images	Apply segmentation mask	Process images	Export data

Incucyte® Advanced Label-Free Classification Analysis Workflow shows the steps required to run a label-free live | dead assay. Images are automatically acquired and segmented using the Incucyte® Cell-by-Cell Analysis Software Module. The Incucyte® Advanced Label-Free Classification add-on identifies morphological features using control wells to train a classifier, which then applies this logic to all wells and timepoints. For more information please visit: Sartorius | morphological-analysis

Ordering Information

Product	Description	Cat. No.	Instrument Compatibility
Incucyte® Cell-by-Cell Analysis Software Module	Enables label-free cell counts on adherent and non-adherent cells, and subsequent cell-by-cell classification based on shape, size, or fluorescence intensity	9600-0031	Incucyte® SX5, S3 and SX1 Live-Cell Analysis System
Incucyte® Advanced Label-Free Classification Analysis Software Module	Add-on module to Incucyte® Cell-by-Cell that enables label-free analysis of live	dead and advanced analysis of morphological changes in adherent cell types	BA-04867	

Learn more at

www.sartorius.com/incucyte

Email: **orders.US07@sartorius.com**

North America: +1 734 769 1600
Europe: +44 1763 227400
APAC: +81 3 6478 5202