

Proliferation, Cell Counting, Viability and Cell Cycle

Incucyte® live-cell labeling reagents and purpose-built software enable long-term (> 48 h) analysis of cell proliferation, viability and cell cycle state.

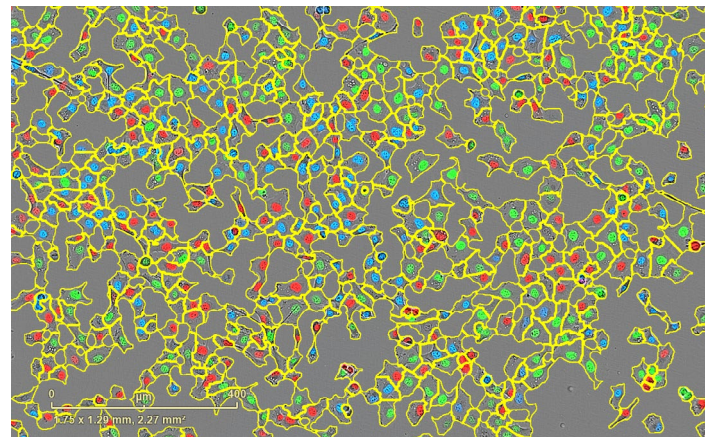
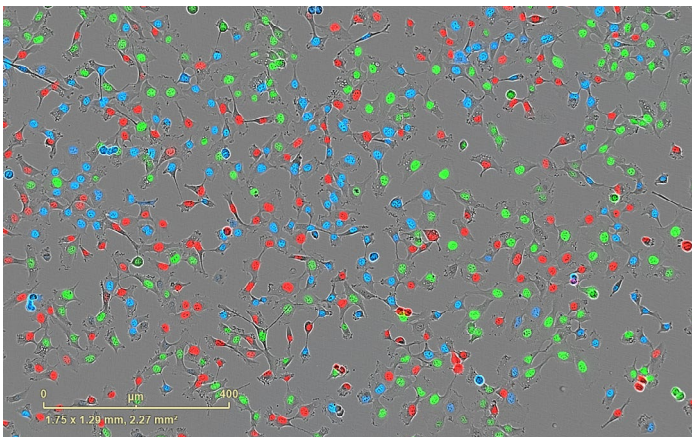
- Minimize experimental artifacts using non-perturbing, live-cell reagents—preservative free, sterile, or concentrated formulations to protect cell health

- Quantify cell proliferation kinetically using label or label-free strategies in adherent or non-adherent cell cultures
- Investigate a range of cell models (mono-, co- or tri-culture) to answer relevant scientific questions
- Maximize each sample with multiplexed readouts of proliferation, cell cycle or cell health that are easily validated by eye

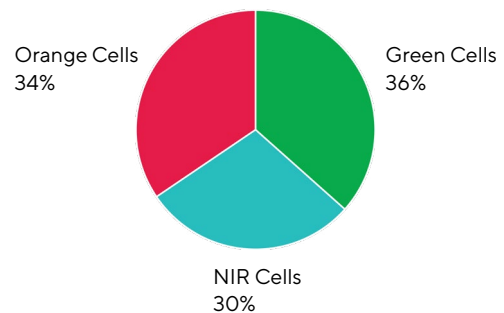
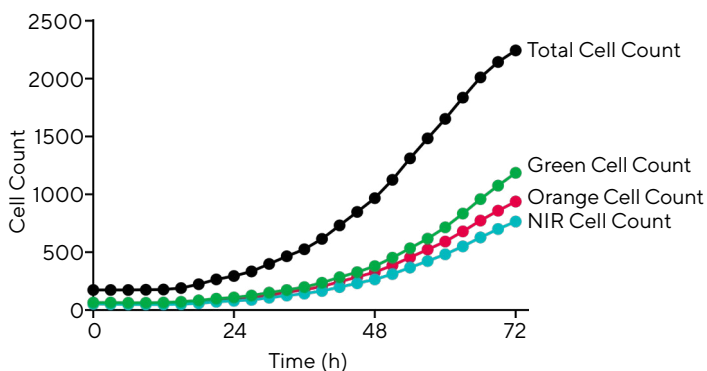
Application Spotlight: Incucyte® Live-Cell Proliferation Assays

Perform long-term, kinetic measurements of proliferation, with or without labels. Incucyte® Nuclight Reagents homogeneously label a variety of cell types for non-

perturbing, continuous analysis of the same population of cells. The Incucyte® Cell-by-Cell Analysis Software Module enables label-free cell identification and counting.



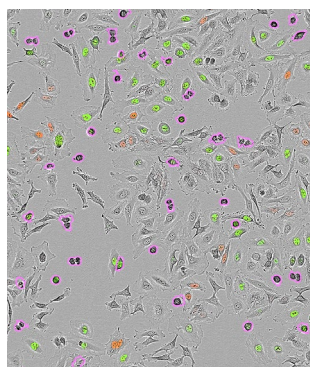
HT-1080 Nuclight Cell Tri-Culture



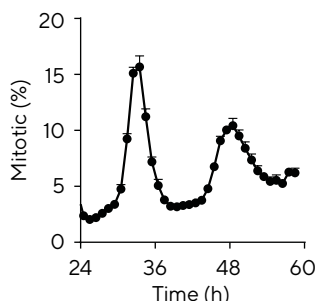
HT-1080 fibrosarcoma cells stably expressing Nuclight Green, Orange, or NIR were monitored for 72 hours. Representative images taken at 48 hours, with and without the label-free Cell-by-Cell Analysis mask, automatically identify the entire population of cells and quantify percentages of green, orange or NIR expressing cells.

Application Spotlight: Incucyte® Cell Cycle Assay

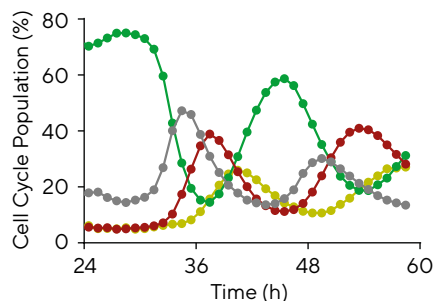
Continuously quantify treatment effects on cell cycle progression of the same population of cells over multiple cell divisions using Incucyte® Cell Cycle Lentivirus Reagents. Gain deeper insight by multiplexing with Incucyte® Annexin V NIR Dye on the Incucyte® SX5.



Label-Free Classification of Cells in Mitosis



Fluorescence Classification of Cell Cycle Phase



Ordering Information

	Product	Description	Cat. No.	Instrument Compatibility
Software	Perform label-free cell counts and subsequent cell-by-cell classification based on shape, size or fluorescence intensity to quantify dynamic changes in cell subsets within heterogeneous living cell cultures with Cell-by-Cell Analysis Software Module. Perform counts and track changes in adherent cell morphology via label-free image segmentation and multivariate analysis of cell shape. Classifier is trained using control wells. Advanced Label-Free Classification Software Module an add-on and requires Incucyte® Cell-by-Cell Analysis Software Module (Cat. No. 9600-0031).			
	Incucyte® Cell-by-Cell Analysis Software Module	1 module	9600-0031	SX5, S3, SX1
	New! Incucyte® Advanced Label-Free Classification Analysis Software Module	1 module	BA-04867	SX5, S3, SX1
Nuclear Dye Labeling Reagents	Cell-permeable DNA stains that specifically label nuclei in cells and are ideally suited for mix-and-read, live-cell quantification of cell proliferation and viability.			
	Incucyte® Nuclight Rapid Red Dye	One vial: 50 µL	4717	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Nuclight Rapid NIR Dye	One vial: 50 µL	4804	SX5
*Nuclear Lentivirus Labeling Reagents	Lentivirus reagents provide homogenous expression of a nuclear-restricted fluorescent protein without altering cell function for live-cell quantification of cell proliferation and viability.			
	Incucyte® Nuclight Green Lentivirus (puro)	0.2 mL	4624	SX5, S3, SX1
		0.6 mL	4475	SX5, S3, SX1
	Incucyte® Nuclight Red Lentivirus (puro)	0.2 mL	4625	SX5 (configured with Green/Red Optical Module), S3, SX1
		0.6 mL	4476	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Nuclight Green Lentivirus (bleo)	0.2 mL	4626	SX5, S3, SX1
		0.6 mL	4477	SX5, S3, SX1
	Incucyte® Nuclight Red Lentivirus (bleo)	0.2 mL	4627	SX5 (configured with Green/Red Optical Module), S3, SX1
		0.6 mL	4478	SX5 (configured with Green/Red Optical Module), S3, SX1
Incucyte® Nuclight Orange Lentivirus (puro)	0.2 mL	4771	SX5	
Incucyte® Nuclight NIR Lentivirus (puro)	0.2 mL	4805	SX5	
Cell Cycle Lentivirus Reagents	Fluorescent ubiquitination-based cell cycle indicators (FUCCI), providing a homogeneous expression of paired fluorescent proteins to distinguish between cells in the interphase or the mitotic phase.			
	Incucyte® Cell Cycle Green/Red Lentivirus (puro)	0.2 mL	4779	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Cell Cycle Green/Orange Lentivirus (puro)	0.2 mL	4809	SX5

* Pre-labeled Nuclight cell lines are also available for purchase. Please visit www.sartorius.com/shop for more information.