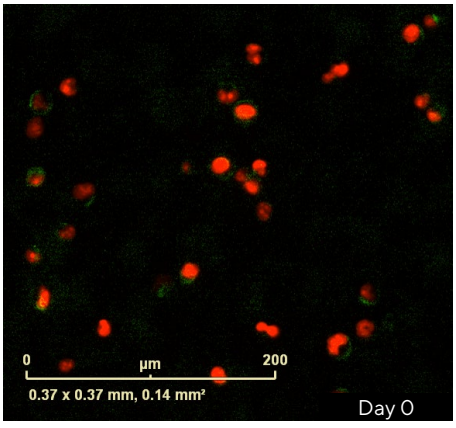
Antibody Internalization and Immunocytochemistry

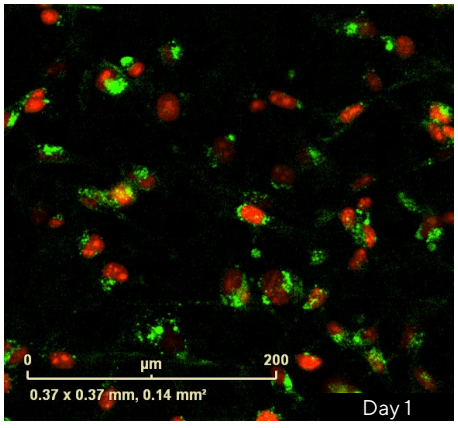
Incucyte® antibody labeling reagents are novel fluorescently labeled Fabs that can be mixed with Fc-containing antibodies and applied directly to living cells for long-term monitoring of spatial and temporal protein dynamics.

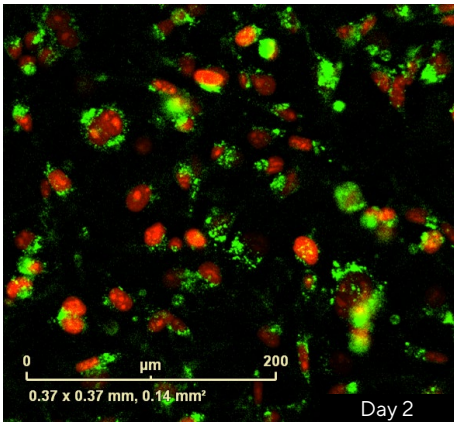
- Increase productivity with rapid single-step labeling paired with mix-and-read protocols for efficient testing of antibody panels
- Associate changes in surface protein expression or antibody internalization with cell function and morphology over time
- Combine sensitive, kinetic fluorescent measurement of protein dynamics with images and movies for visual confirmation of biology in every well

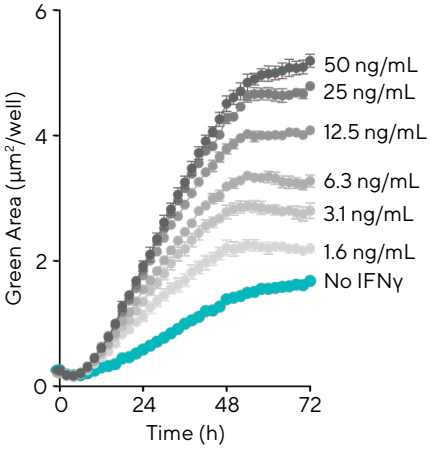
Application Spotlight: Monitoring Dynamic Cell Surface Protein Expression

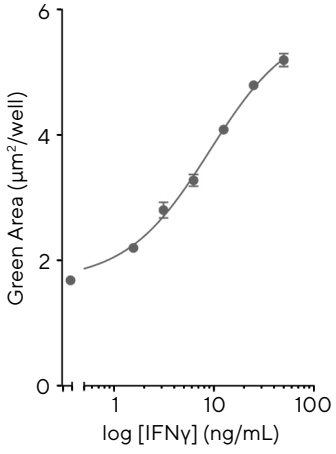
Quantify cell surface protein expression and distribution in live cells to study long-term protein dynamics and their relationship to function and morphology using Incucyte® Fabfluor-488 or Fabfluor-594 Antibody Labeling Reagents.







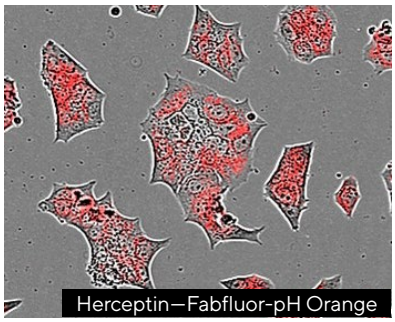


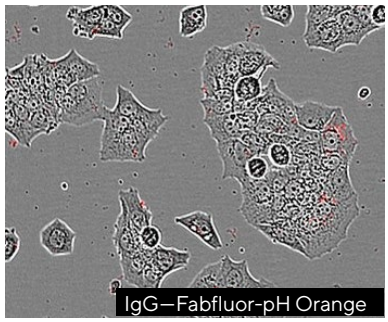


Incucyte® Fabfluor-488 was conjugated to anti-PD-L1 Ab (BioLegend) and added to Nuclight Red MDA-MB-231 breast cancer cells in the absence and presence of IFNγ (+ Incucyte® Opti-Green background suppressor). Quantification of the green fluorescent area shows that IFNγ induces a time- and concentration-dependent increase in PD-L1 expression.

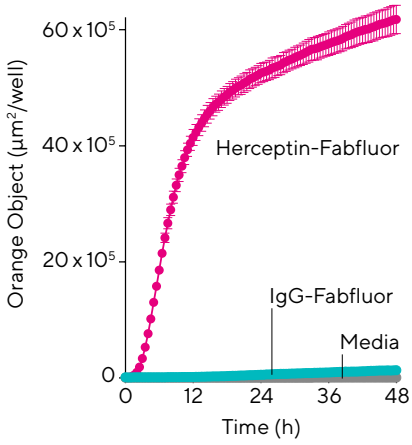
Application Spotlight: Antibody Internalization

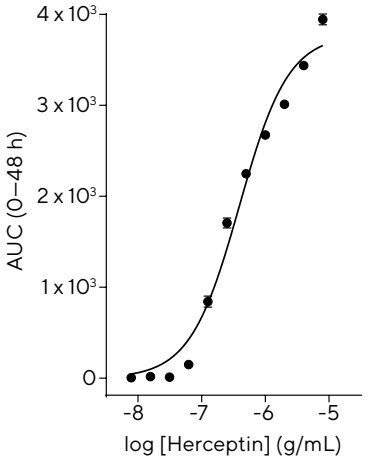
Efficiently evaluate the full time course of antibody internalization for real-time analysis of internalization rates under physiological conditions using Incucyte® Fabfluor-pH Antibody Labeling Reagents.





HD phase and orange fluorescence images (10X) show HER-2 positive BT-474 cells treated with Incucyte® Fabfluor-pH Orange labeled Herceptin display orange (pseudo-colored red), cytosolic fluorescence while cells treated with an isotype control display no cellular fluorescence. Time-course data shows a rapid increase in orange object area over time in cells treated with labeled Herceptin, but not with IgG1 isotype control.





Ordering Information

	Product	Description	Cat. No.	Instrument Compatibility
Software	Perform label-free cell counts and quantify dynamic changes in cell subsets within heterogeneous living cell cultures.			
	Incucyte® Cell-by-Cell Analysis Software Module	1 module	9600-0031	SX5, S3, SX1
Fabfluor-pH Antibody Labeling Reagents	Novel pH-sensitive Fc-targeting antibody fragment labels antibody of choice for analysis of antibody internalization.			
	Incucyte® Human Fabfluor-pH Orange Antibody Labeling Dye	One vial: 50 µg	4812	SX5
	Incucyte® Human Fabfluor-pH Red Antibody Labeling Dye	One vial: 50 µg	4722	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Mouse IgG1 Fabfluor-pH Red Antibody Labeling Dye	One vial: 50 µg	4723	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Mouse IgG2a Fabfluor-pH Red Antibody Labeling Dye	One vial: 50 µg	4750	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Mouse IgG2b Fabfluor-pH Red Antibody Labeling Dye	One vial: 50 µg	4751	SX5 (configured with Green/Red Optical Module), S3, SX1
	Incucyte® Rat Fabfluor-pH Red Antibody Labeling Dye	One vial: 50 µg	4737	SX5 (configured with Green/Red Optical Module), S3, SX1
Fabfluor Live-Cell Immunocytochemistry Labeling Reagents	Novel fluorescently tagged Fc-targeting Fab fragments label your antibody of choice for cell surface protein expression.			
	Incucyte® Mouse IgG2a Fabfluor-488 Antibody Labeling Dye	One vial: 50 µg	4743	SX5, S3, SX1
	Incucyte® Mouse IgG2b Fabfluor-488 Antibody Labeling Dye	One vial: 50 µg	4744	SX5, S3, SX1
	Incucyte® Mouse IgG1 Fabfluor-488 Antibody Labeling Dye	One vial: 50 µg	4745	SX5, S3, SX1
	Incucyte® Mouse IgG1 Fabfluor-555 Antibody Labeling Dye	One vial: 50 µg	BA-04873	SX5
	Incucyte® Mouse IgG1 Fabfluor-594 Antibody Labeling Dye	One vial: 50 µg	4844	SX5 (configured with a Green/Red Optical Module), S3, SX1
	Incucyte® Mouse IgG2a Fabfluor-594 Antibody Labeling Dye	One vial: 50 µg	BA-04863	SX5 (configured with a Green/Red Optical Module), S3, SX1