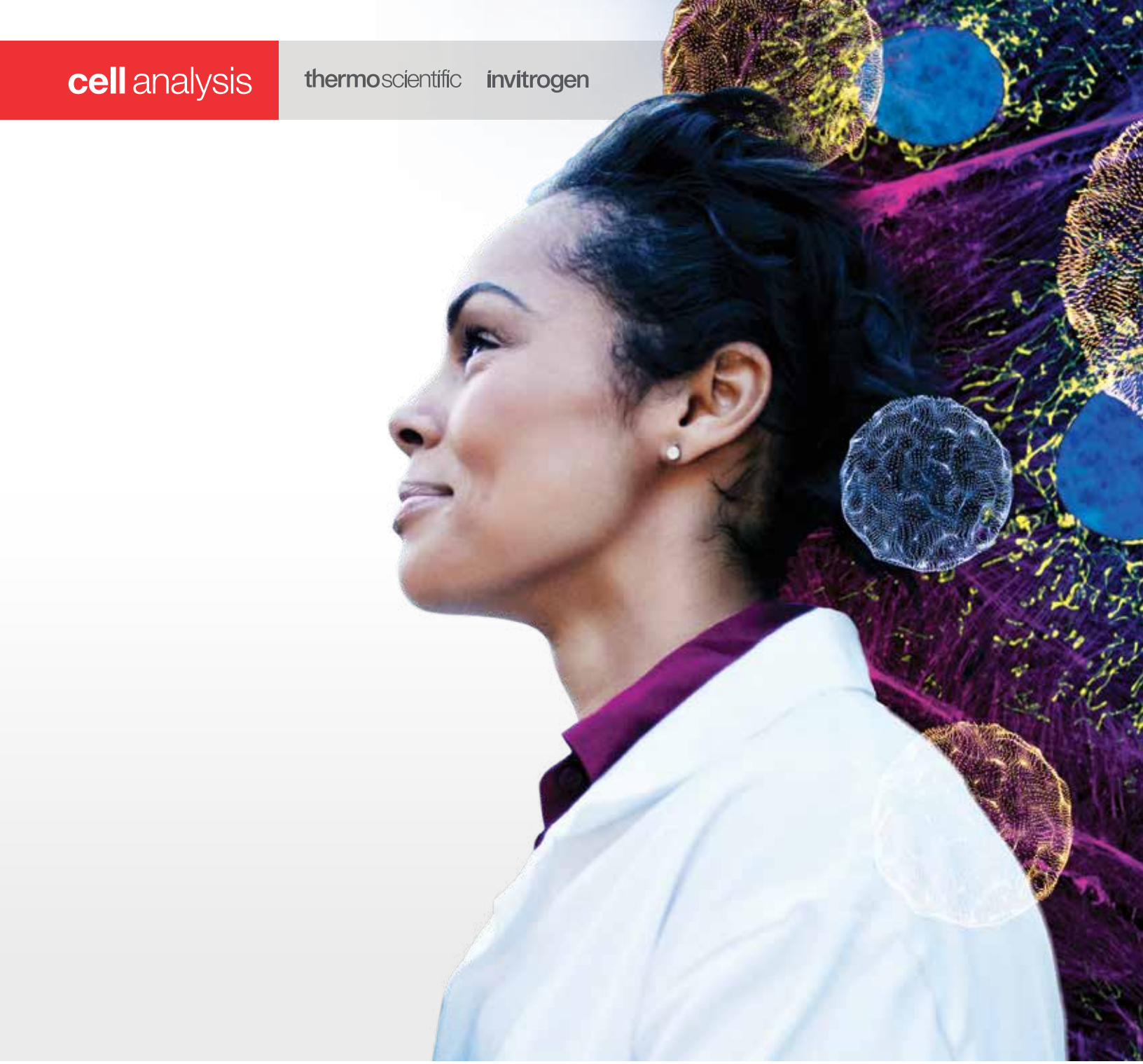
cell analysis

thermoscientific invitrogen



Imaging, labeling, and detection solutions

Microscopy | High-content analysis | Plate reading | Reagents

ThermoFisher SCIENTIFIC

Eliminating the complexities of cellular analysis

Our cellular analysis product portfolio combines the strengths of Invitrogen™ fluorescent reagents and a complete line of versatile analysis instrumentation. Select from a line of heavily peer-referenced platforms to make the discoveries that advance your understanding today and catalyze your research goals of tomorrow.

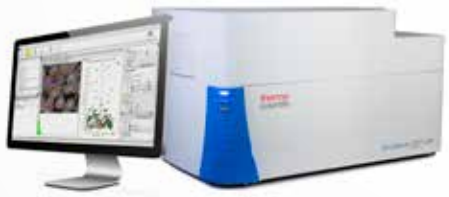
Our comprehensive imaging portfolio includes:

- Cell imaging systems
- High-content analysis systems
- Microplate readers
- Cell imaging reagents
- Automated cell counting systems

All of our analysis systems are designed to work together—from the initial cell culture check to more complex analyses. Discover more about your samples with automated cell counting, long-term live-cell imaging, automated multiwell plate scanning, and phenotypic screening.

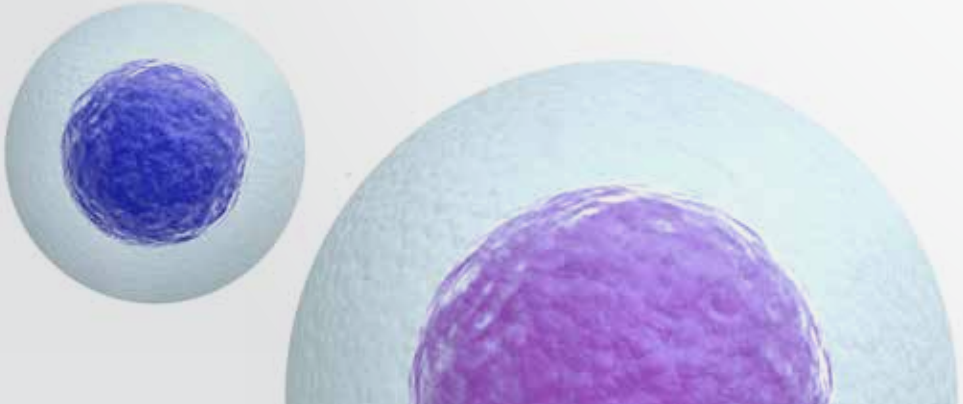
Invitrogen™ EVOS™ imaging systems

Invitrogen™ Countess™ cell counters

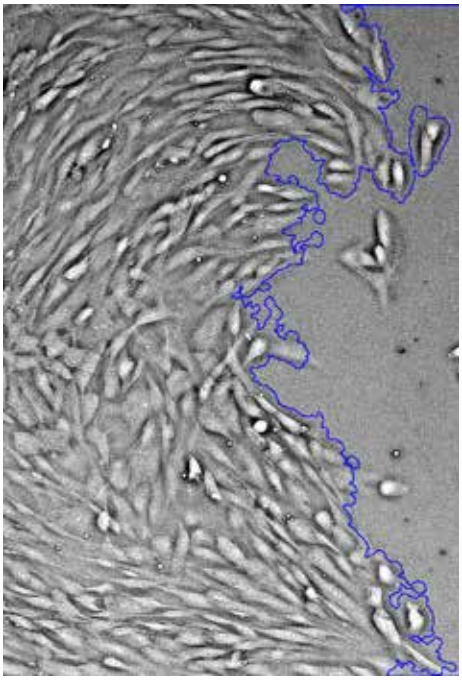


Thermo Scientific™ CellInsight™ high-content analysis systems

Thermo Scientific™ Varioskan™ LUX multimode plate reader



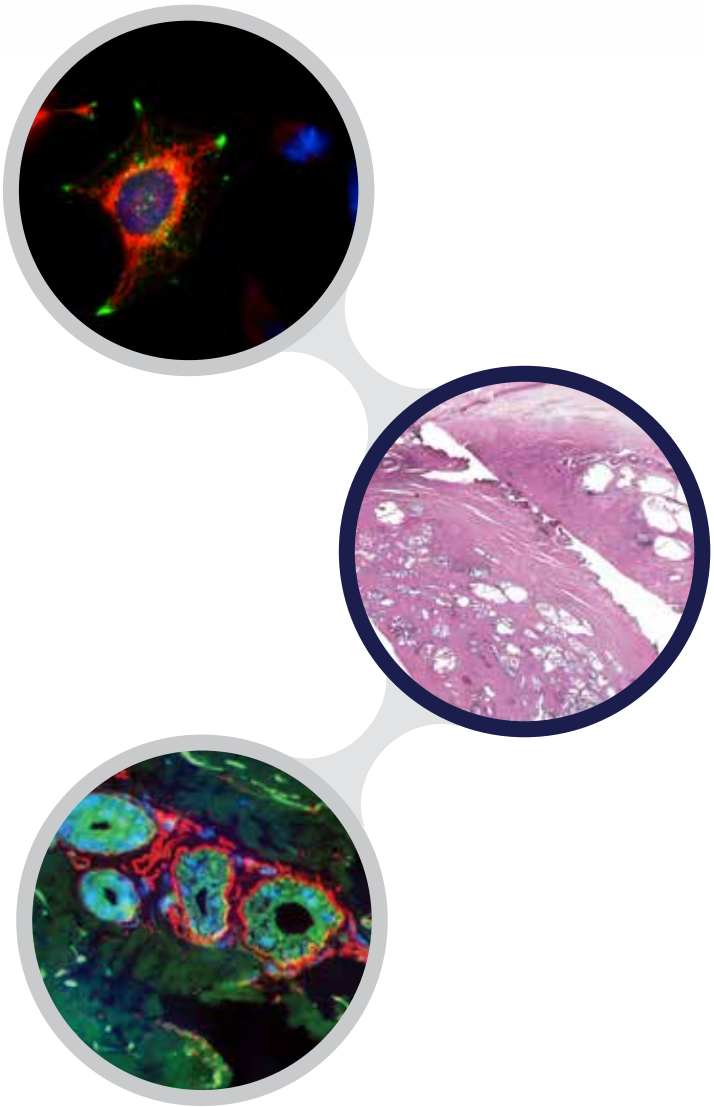
Contents



Compact and portable imaging systems

Now you can have an easy-to-use cell imaging platform where you want it and when you want it. Simply place your Invitrogen™ EVOS™ imaging system at your desired location, flip the switch, and you'll typically be ready to go in under 2 minutes.

From intimate hands-on demonstrations to presentations of data in front of large audiences, EVOS imaging systems are perfect for teaching, sharing, learning, and discovery.



Publication-quality imaging

In today's competitive scientific environment, generating publication-quality images is critical to your success. To help ensure you get the publication-quality images you need, EVOS systems give you top-of-the-line imaging components, including:

- High-quality camera and optics to capture high-resolution images
- LED illumination to produce superior signal-to-noise ratios
- Easy-to-use image processing and analysis software for ready-to-publish images

Technology that's better for our environment

Traditional light sources in fluorescence microscopy use mercury-based bulbs that contain a toxic carcinogen requiring special handling and disposal. By using LED light sources, EVOS systems do not require these special steps and are thereby more environmentally friendly and more energy efficient.

EVOS imaging systems at a glance




	FL Auto 2	M5000	FLoid	XL Core
	Cat. No. AMAFD2000	Cat. No. AMF5000	Cat. No. 4471136	Cat. No. AMEX1000
	Fluorescence solutions			Bright-field solutions
Hardware attributes				
Simple installation	Yes	Yes	Yes	Yes
Motorized encoded X/Y scanning stage	Yes			
Manual mechanical stage		Yes	Yes	Yes
Mechanical or fixed stage option				Yes
Objective turret positions	5	5		4
Objective range	1.25–100x	1.25–100x	20x	1.25–60x
Fluorescence channels	4	4	3	
Monochrome or color camera option	Both	Mono	Mono	Color
Epifluorescence	Yes	Yes	Yes	
Transmitted light	Yes	Color	Yes	Yes
Fits in hood or on benchtop	Yes	Yes	Yes	Yes
Associated printer		Optional	Yes	
Onstage incubator	Optional	Optional		
USB ports	Yes	Yes	Yes	Yes
DVI ports		Yes		
Software attributes				
Z-stack capability	Yes	Yes		
Time-lapse imaging	Multichannel	Multichannel		
Celleste analysis software	Optional	Optional	Optional	Optional
Intuitive onboard software	Yes	Yes	Yes	Yes
Networking capability	Yes	Yes	Yes	
Automated multiwell plate screening	Yes			
Integrated reagent selection guide			Yes	

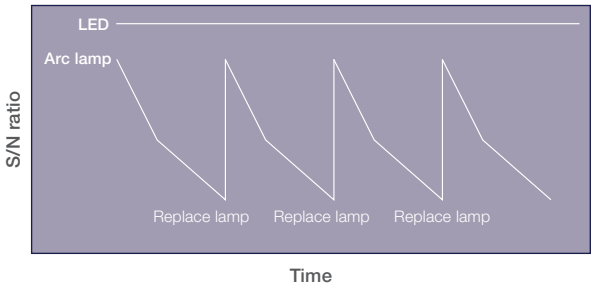
The power of LED illumination

All EVOS fluorescence cell imaging systems utilize LED light sources, providing high-intensity output over a short light path for the most efficient fluorophore excitation.

- A shorter light path enables better detection of fluorescence signals
- Stable illumination intensity gives consistent results
- >50,000-hour bulb lifetime helps lower your laboratory costs
- Adjustable light intensity reduces photobleaching and phototoxicity

Stability comparison

Mercury and metal halide vs. LED



Continuous light intensity

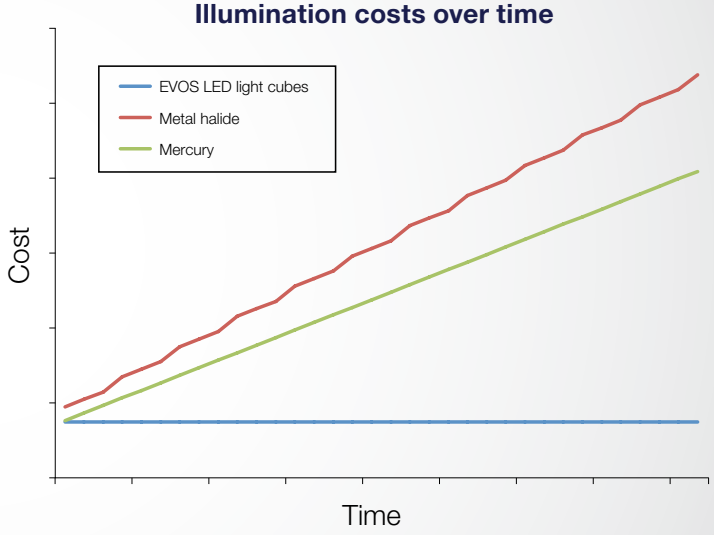
Mercury arc lamps can decrease in intensity by 50% in the first 100 hours of operation—plus, images acquired in different sessions cannot be quantitatively compared using mercury illumination without complicated calibrations. Because EVOS systems have stable light cube intensity, users can rely on consistent illumination and can easily compare quantitative results from images acquired on different days.

Placing the LED light cube as close as possible to the objective turret minimizes optical elements in the light path to help increase the efficiency of fluorophore excitation, enabling better detection of weak fluorescence signals.

EVOS hard-coated filter sets enable higher transmission efficiencies

Hard-coated filter sets are generally more expensive, but they have sharper edges and significantly higher transmission efficiencies that typically result in >25% more light transmission than traditional soft-coated filters. With the hard-coated filter sets of the EVOS system, your light cubes cost less over time and are designed to have brighter fluorescence, higher transmission efficiencies, the ability to detect faint fluorescence signals, and better signal-to-noise ratios.

Illumination costs over time



Customizable instruments for your fluorescence experiments

You can get more out of your research with easy-to-use, modular systems that can adjust to fit your experimental needs. We offer imaging systems that can be customized with a variety of LED light cubes, vessel holders, and objectives.

Common light cubes

Light cube	Excitation (nm)	Emission (nm)	Dye	Cat. No.
DAPI	357/44	447/60	DAPI, Hoechst stain, BFP	AMEP4650
TagBFP	390/18	447/60	TagBFP	AMEP4668
CFP	445/45	510/42	ECFP, Lucifer Yellow, Evans Blue	AMEP4653
GFP	470/22	510/42	GFP, Alexa Fluor 488, SYBR Green, FITC	AMEP4651
YFP	500/24	524/27	EYFP, acridine orange + DNA	AMEP4654
RFP	531/40	593/40	RFP, Alexa Fluor 546, Alexa Fluor 555, Alexa Fluor 568, Cy3, MitoTracker Orange, Rhodamine Red, DsRed	AMEP4652
Texas Red	585/29	624/40	Texas Red, Alexa Fluor 568, Alexa Fluor 594, MitoTracker Red, mCherry, Cy3.5	AMEP4655
Cy5	628/40	692/40	Cy5, Alexa Fluor 647, Alexa Fluor 660, DRAQ5	AMEP4656
Cy5.5	655/46	794/16	Cy5.5, Alexa Fluor 660, Alexa Fluor 680, Alexa Fluor 700	AMEP4673
Cy7	710/40	775/46	Cy7, IRDye 800CW	AMEP4667
CFP-YFP EM	445/45	542/27	CFP/YFP (for FRET applications)	AMEP4669
AO	470/22	488/20	Acridine orange + RNA, simultaneous green/red with FL color	AMEP4670
AO Red	442/46	628/32	Acridine orange + RNA, CTC formazan, Fura Red (high Ca^{2+})	AMEP4671
White	N/A	N/A	Reflected light applications	AMEP4672

See a complete list of available light cubes at **thermofisher.com/evoslightcubes**

The Invitrogen™ EVOS™ M5000 and EVOS™ FL Auto 2 systems and the Invitrogen™ Countess™ II FL Automated Cell Counter are powered by the same EVOS™ light cubes that can be easily transferred between systems to increase the experimental capabilities of your lab while saving money.

The wide variety of light cubes available provides flexibility for multiple research applications.

Light cubes can be purchased individually as needed to accommodate your lab's budget and research needs.

Countess II FL Automated Cell Counter

EVOS M5000 Imaging System

EVOS FL Auto 2 Imaging System

EVOS FL Auto 2 Imaging System

A powerful, flexible, intuitive, fast, and fully automated system

Bring high performance and fast, automated imaging right to your lab bench with the Invitrogen™ EVOS™ FL Auto 2 Imaging System. This system has been designed with advanced capabilities to simplify demanding cell-based imaging applications such as live cell analysis, image tiling, and Z-stacking, so you can focus on acquiring images and data rather than instrument operation.

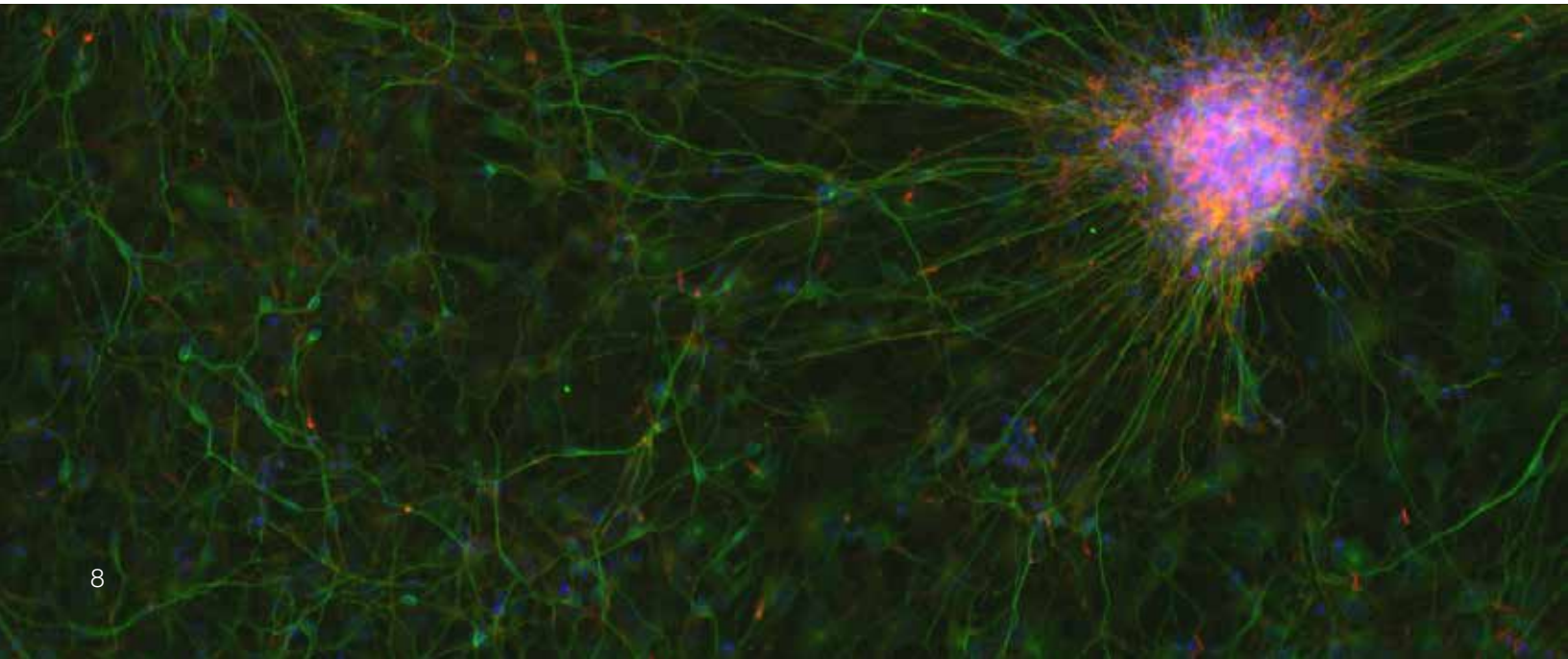
Features

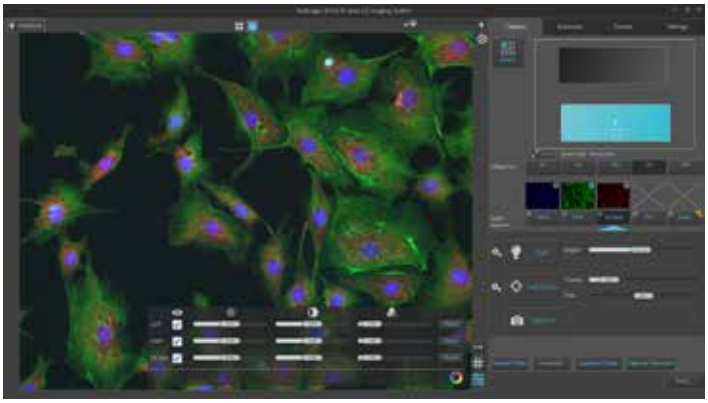
- **Speed**—scan a 96-well plate in 3 fluorescence channels in less than 5 minutes
- **Flexibility**—customize the system with more than 20 user-changeable LED light cubes, dual cameras (monochrome and color), a variety of objectives ranging from 1.25x to 100x, and multiple vessel holders
- **Time-lapse live cell imaging**—onstage incubator option for precise control of temperature, humidity, and gases for normoxic or hypoxic conditions allows a wide range of biological studies under physiological conditions
- **Two cameras, no compromises**—all systems come with two cameras, a dedicated high-sensitivity monochrome camera optimized for fluorescence imaging and quantitation, and a dedicated high-resolution color camera optimized for colorimetric imaging
- **Area view**—move rapidly and seamlessly between single-field mode and low- and high-magnification scan modes to easily define and capture the area of interest
- **Automation**—time-saving features such as autofocus, rapid stage movement, and automated routines help reduce time to complete experiments, allowing high throughput, high data quality, and improved experimental reproducibility
- **Data analysis**—extensive quantitative imaging and statistical analysis in combination with Invitrogen™ Celleste™ Image Analysis Software, an optional advanced software package offering powerful tools for image segmentation and classification that can be used for cell counting and measuring intensity, area, and shape changes over time

SmartStart™ installation and training

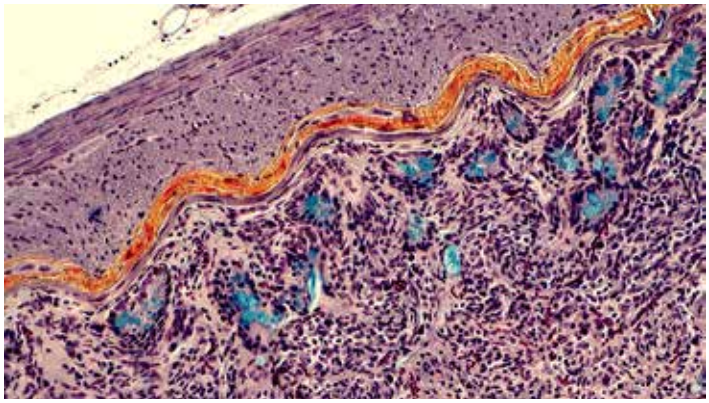
A dedicated installation and training program will get you up and running in just one day. One of our dedicated experts comes to your site to provide hands-on workflow training and make sure your lab is quickly enabled to utilize the powerful instrument features to maximize productivity.

Neural stem cell colony, 10x objective; light cubes: GFP, RFP.





Easy-to-navigate user interface.



FFPE section of rat intestine tissue, 20x objective, color camera.

EVOS FL Auto 2 Imaging System specifications

Attribute	Detail
Illumination	LED light cubes (>50,000-hour life per light cube) with adjustable intensity
Fluorescence channels	Simultaneously accommodates 4 fluorescence cubes plus bright-field imaging. Broad selection of standard and specialty light cubes (more than 20 to choose from)
Contrast methods	Fluorescence and transmitted light (bright-field and phase-contrast)
Objective capacity	5-position; front-mounted control
Objectives (not included)	Wide selection of high-quality, long working distance (LWD), and coverslip-corrected objectives ranging from 1.25x to 100x
Condenser	60 mm LWD condenser, 4-position turret with a clear aperture and 3-phase annuli
Stage	Motorized X/Y scanning stage; travel range 120 x 80 mm with submicron resolution. Drop-in inserts to receive vessel holders, and lockdown holders to fix sample in place during long scans
LCD display	23 in. high-resolution touchscreen color monitor (also fully controllable via mouse); 1,920 x 1,080 pixel resolution
Cameras	High-sensitivity 1.3 MP CMOS monochrome camera with 1,328 x 1,048 pixels; high-sensitivity 3.2 MP CMOS color camera with 2,080 x 1,552 pixels
Captured images	16-bit monochrome TIFF or PNG; 8-bits per channel TIFF, PNG, or JPG; time-lapse AVI
Dimensions (L x W x H)	46 x 33 x 36 cm (18 x 14 x 13 in.)
Weight	16 kg (35 lb)

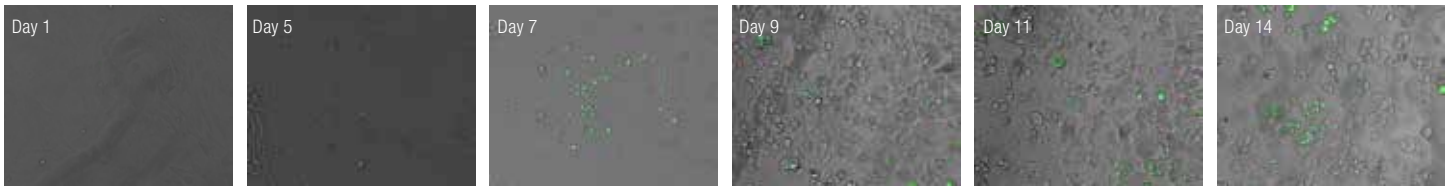
Live cell imaging with the Onstage Incubator

When combined with the onstage incubation system, the EVOS FL Auto 2 Imaging System is ideal for long-term monitoring of cell cultures and time-lapse imaging at high resolution. The Invitrogen™ EVOS™ Onstage Incubator is an environmental chamber that allows for precise control of temperature, humidity, and three gases for time-lapse imaging of live cells under both physiological and nonphysiological conditions, making the system ideal for demanding hypoxia experiments. The EVOS Onstage Incubator allows you to:

- Intuitively set environmental and image-acquisition parameters
- Easily maintain physiological or nonphysiological conditions with precise control
- Adjust environmental parameters while the experiment is running
- Save lab space with a small footprint and sleek design

Once captured, you can seamlessly create and export fluorescence or bright-field images as movies:

- Create time-lapse images of every well of a 96-well plate, simultaneously
- Acquire time-lapse images in a single plane or Z-stacks
- Autofocus in each channel and region of interest
- Use metadata and time stamps included with each image frame of time-lapse movies



In these time-lapse images, 3T3-L1 cells (mouse fibroblasts) show increased adiposome numbers and size as they are differentiated into adipocytes with differentiation media.

EVOS Onstage Incubator specifications	
Compatible vessels	Multiwell plates, 35, 60, and 100 mm petri dishes, T-25 flasks, chamber slides, and more
Temperature range	Ambient to 40°C
CO_2 range	0–20%
O_2 range	0% to ambient
Humidity range	>80% relative humidity at 37°C
Dimensions (H x D x W)	25 x 19 x 3.7 cm (environmental chamber) 37 x 16 x 20 cm (control unit)
Weight	1.5 kg (environmental chamber) 10 kg (control unit)

Celleste Image Analysis Software

The Celleste Image Analysis Software offers powerful image visualization and analysis functionalities with point-and-click simplicity. Coupled with the intuitive interface and image acquisition capabilities of the EVOS microscopes, Celleste software allows you to seamlessly capture, save, process, measure, and analyze your images and create data.

Process and analyze

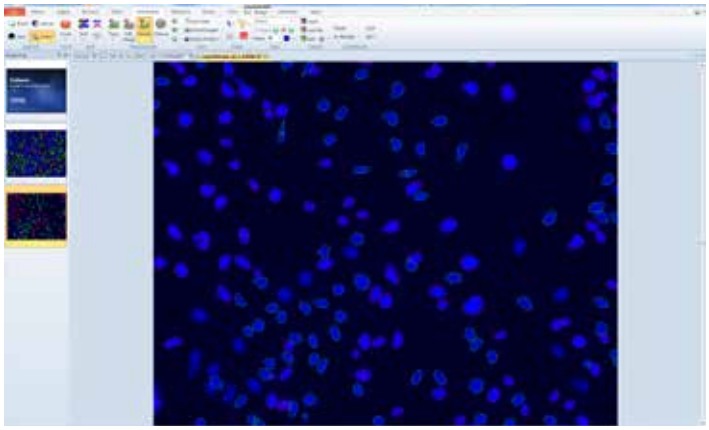
After image acquisition, immediately apply a suite of image processing and enhancement functions, including smart segmentation and classification, with a few clicks of your mouse. Use auto-alignment for overlays and remove background to reveal critical details with a wide range of filters. Once satisfied with the results from one image, apply the same steps to a set of time-lapse images, scans, or results from different treatments.

Measure and quantify

Easily measure and analyze your images with a variety of measurement tools such as distance, region, angles, and area. The ability to identify an object in time-lapse experiments can be used to track cell movement or migration. This feature is particularly powerful in combination with the EVOS Onstage Incubator that allows continuous monitoring of cells under controlled environmental conditions.

Count and classify

Using a number of manual and automatic measurement tools, easily count and characterize cells and subcellular objects based on area, length, shape, and light intensity. Flexible segmentation tools allow you to label images based on color or intensity level. After object counting, sort and display counted images based on size and other parameters.



Report and share

Upon completing image analysis, a suite of annotation and reporting tools allows you to create presentation-ready image and data reports with a few clicks, and to share them with others in PDF, Microsoft™ PowerPoint™, and Excel™ formats.

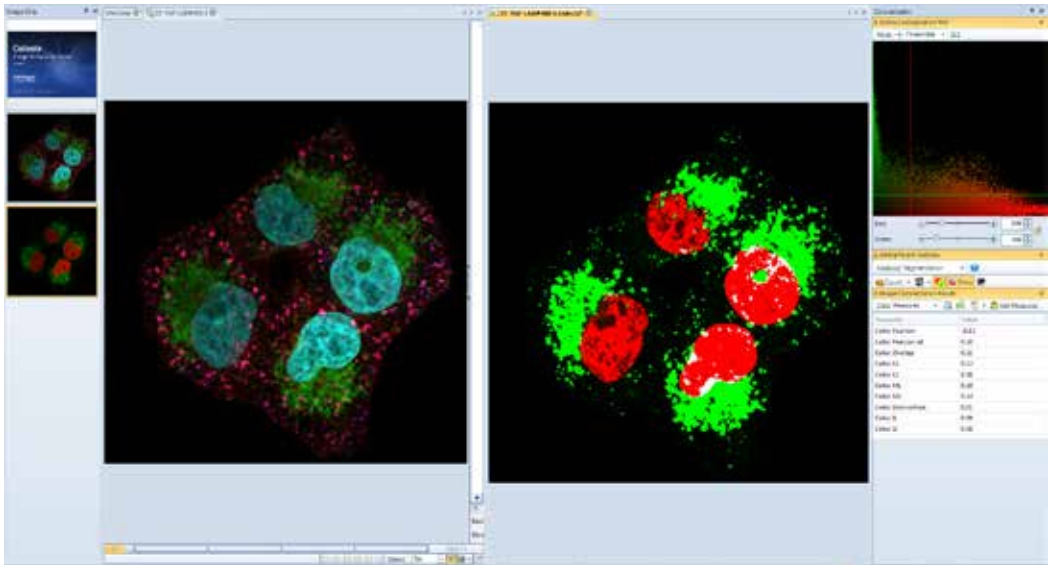
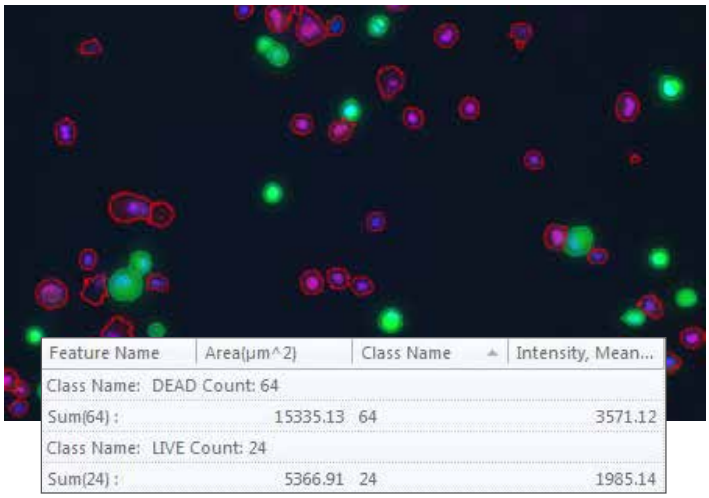


Image analysis with Celleste software

Cell viability

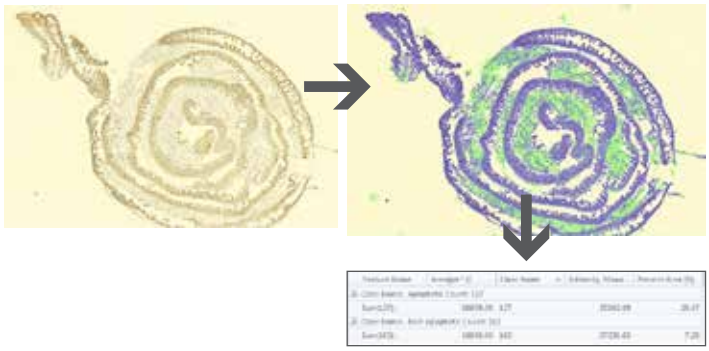
Following cell viability over time can assist in evaluating the potency of cytotoxic compounds as part of cancer drug screening or just as part of good cell maintenance protocols. With the viability tools of Celleste software, you can combine a stain that gives total cell number with a dead cell stain that only penetrates the leaky membranes of dying and dead cells. We offer a variety of Invitrogen™ LIVE/DEAD™ kits based on these same principles.



Feature Name	Area(µm^2)	Class Name	Intensity, Mean...
Class Name: DEAD Count: 64			
Sum(64) :	15335.13	64	3571.12
Class Name: LIVE Count: 24			
Sum(24) :	5366.91	24	1985.14

Apoptosis

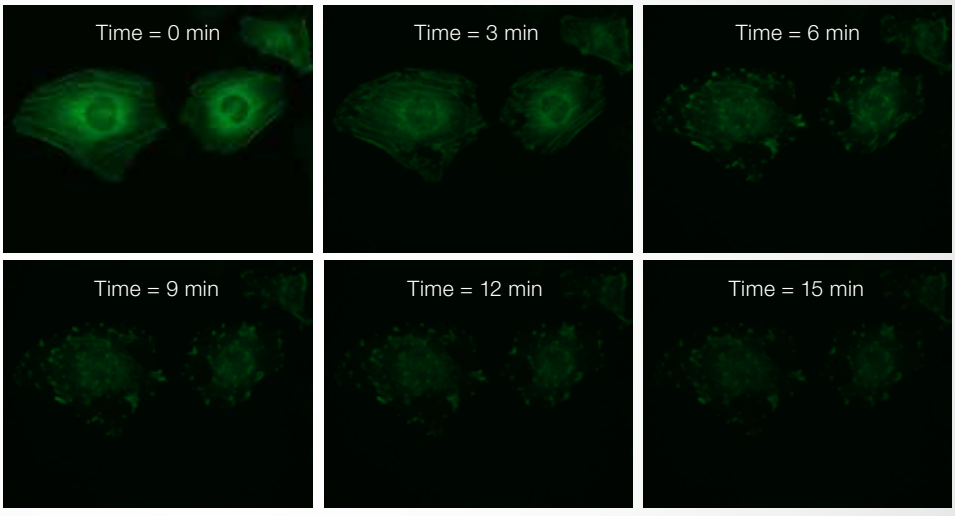
Membrane permeability is one of the first steps in the programmed cell-death pathway. It's part of both normal and pathological processes, and there are a number of reagents and kits available to measure apoptosis. With the EVOS FL Auto 2 Imaging System and Onstage Incubator, induction of apoptosis and death can be measured over time by combining nuclear staining of membrane-impermeable DNA stains and a caspase sensor.

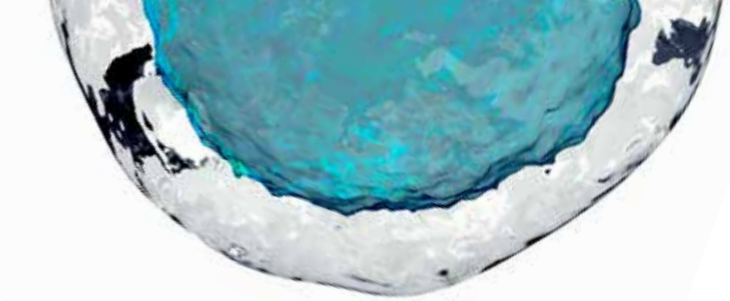


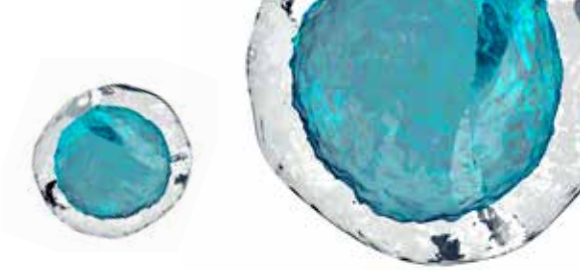
Cytoskeletal disruption

Time-lapse fluorescence microscopy on the EVOS FL Auto 2 Imaging System enables reliable and straightforward visualization of the cytoskeleton, in both fixed and live-cell systems.

HeLa cells transduced with Invitrogen™ CellLight™ Actin-GFP were treated with 10 µM cytochalasin D. As time progresses, the actin filaments are destroyed by the depolymerizing effects of cytochalasin D.

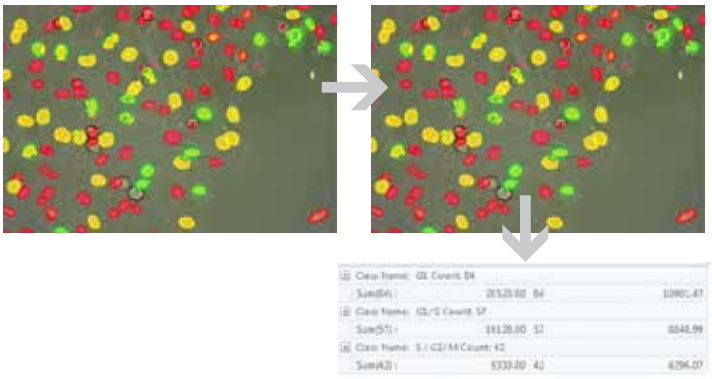


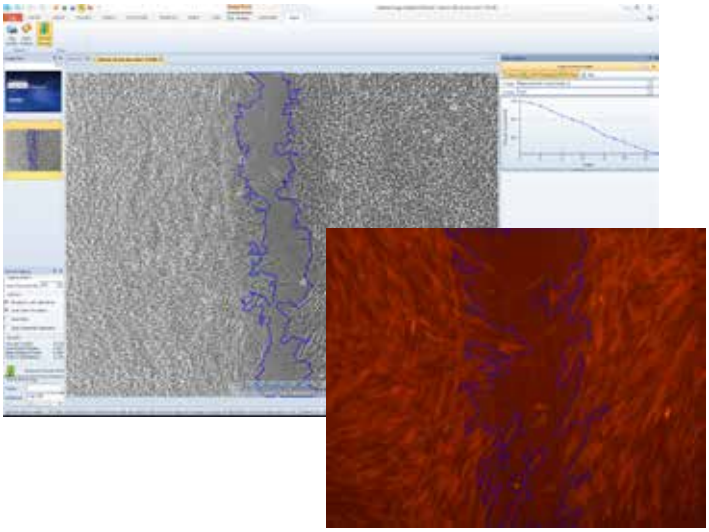




Cell cycle

Quantitating cell numbers at various cell cycle checkpoints are integral for cancer research. Researchers looking for cell cycle developmental changes or modulators of the cell cycle can use Celleste Image Analysis Software to monitor for changes in intensity and color as cells go through the different cell cycle phases.



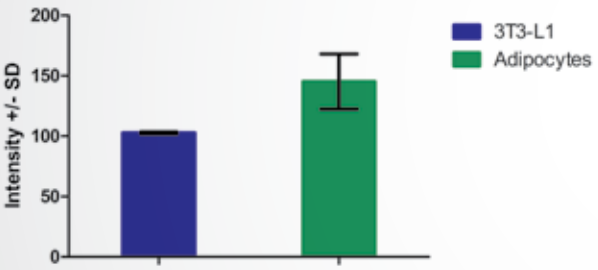


Wound healing

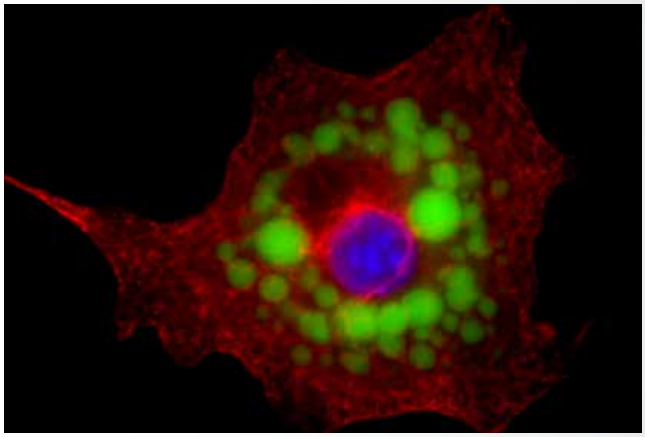
Wound healing, embryonic development, and tumorigenesis involve an orchestrated movement of cells in particular directions. Cells often migrate in response to external signals, including chemical and mechanical. An understanding of the mechanism by which cells migrate may lead to the development of novel therapeutic strategies for controlling, for example, invasive tumor cells. With the wound-healing measurement on Celleste software, you can generate migration-rate and -direction data with the touch of a button.

Adipogenesis

One system allows for the investigation of multiple factors that affect adipogenesis, such as cell health, providing robust data on this important area of cell and developmental biology.



Images taken every few days of 3T3-L1 cells differentiating into adipocytes were analyzed on Celleste software, which show an increase in the number of adiposomes over time.



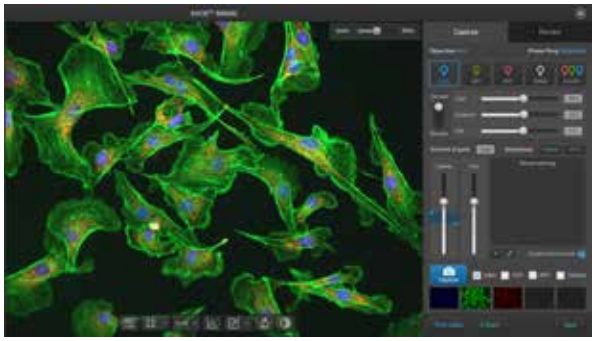
Adipocyte, 60x oil objective; light cubes: GFP, RFP, DAPI.

EVOS M5000 Cell Imaging System

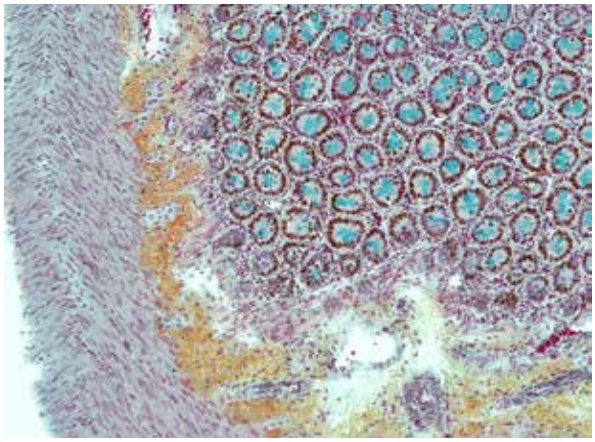
Form, function, and flexibility in one

Features

- Onboard software for acquisition, annotation, and analysis
- Machine learning–based cell counting and confluency analysis
- Autofocus, Z-stack capability, time-lapse imaging, and single-click, multichannel capture
- Automated multichannel fluorescence
- High-resolution monochrome camera and novel LED-based color illumination modes
- Thermo Fisher Cloud enables you to access images and data anytime and anywhere



Intuitive interface allows even novice users to take images like a pro within minutes.



Unique and proprietary color illumination mode enables rendering of true color in transmitted light.

System highlights

Hardware	
Illumination	LED light cubes (>50,000-hour life per light cube) with adjustable intensity
Contrast methods	Epifluorescence and transmitted light (bright-field and phase-contrast)
Objective turret	5-position control
Fluorescence channels	Simultaneously accommodates up to 4 fluorescent light cubes
Condenser working distance	60 mm
Stage	Mechanical stage with x- and y-axis fine-positioning controls and automated z-axis software controls; Interchangeable vessel holders available
LCD display	an 18.5" high-resolution, articulated LCD monitor
Camera	Highly sensitive 3.2 MP, monochrome CMOS camera (2,048 x 1,536) with 3.45 µm pixel resolution
Output ports	3 USB ports, 1 DVI port (supports direct output to USB and networked storage), Wi-Fi connectivity
Power supply	AC adaptor
Dimensions (H x D x W)	48.2 x 50.8 x 58.42 cm (19 x 20 x 23 in.)
Weight	18.15 kg (40 lb)

Software

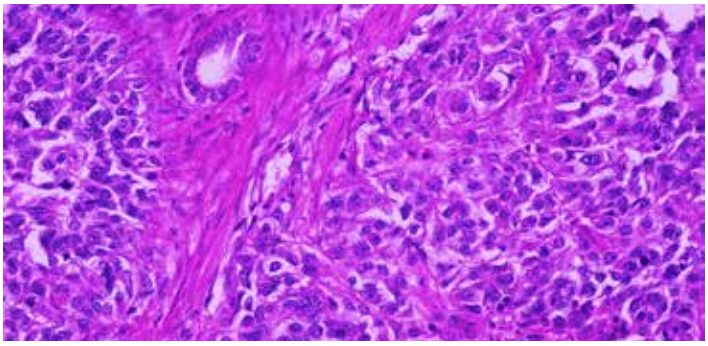
Designed by biologists for biologists, the EVOS M5000 microscope is remarkably easy to use. Following seamless image acquisition, you can analyze, edit, and annotate your images using a set of convenient tools available in both live mode and for saved images. For common applications, we have created easy-to-use image analysis tools driven by sophisticated segmentation algorithms. With a few clicks you can get a total count of your DAPI-stained cells or an estimate of confluence for reproducibility when you split your cells. Once you have edited and analyzed your images, save the images and data to the embedded hard drive, an external USB device, a local network, or to Thermo Fisher Cloud, using the Invitrogen™ EVOS™ Image Analysis app.

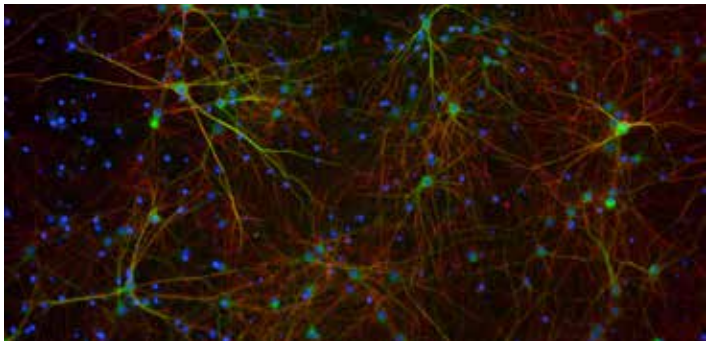
Applications

The EVOS M5000 system integrates precision components with a unique modern design that enables high-quality fluorescence and color imaging with unprecedented flexibility. It is a fully integrated system that combines precision optics, an 18.5" high-resolution articulated LCD monitor, and a highly sensitive 3.2 MP monochrome CMOS camera (2,048 x 1,536) with 3.45 µm pixel resolution. The monochrome camera affords the best sensitivity for detection of faint fluorescence signals and allows quantitative analysis, while the unique and proprietary color illumination mode enables rendering of true color in transmitted light (e.g., imaging stained tissue samples).

Key software capabilities:

- Z-stacking
- Time-lapse
- Automated cell counting
- Confluency measurement





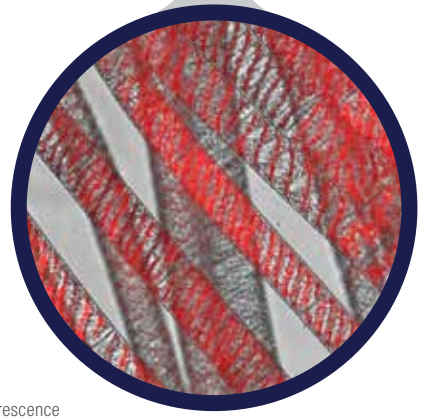
EVOS FLoid Imaging Station

Simple, budget-friendly, three-color fluorescence cell imaging

Features

- **Simplicity**—fully integrated system with intuitive, multilingual user interface
- **Speed**—get results in a snap, without warm-up, cooldown, or filter changes
- **Convenience**—capture and print images on your bench, rather than in the darkroom
- **Robustness**—no moving parts, and long-life LEDs for reliable day-to-day use

Photo printer (optional)



Plant autofluorescence

System highlights

Hardware	
Illumination	LED light (no cubes) (>50,000-hour life) with adjustable intensity
Contrast methods	Epifluorescence and transmitted light
Objective	20x fixed fluorite
Fluorescence channels	DAPI (blue), FITC (green), and Texas Red (red)
Working distance	5.9 mm
Stage	Mechanical “glide” stage with fine range-of-motion control (4 mm movement in x-y dimensions), universal format, compatible with all vessel types
LCD display	15 in. high-resolution color monitor with adjustable tilt (1,366 x 768 pixels)
Camera	Monochrome; high-sensitivity interline CCD camera
Output ports	4 USB ports (3 on side for accessories; 1 in front for data storage)
Power supply	AC adaptor
Dimensions (H x D x W)	53.6 x 47.0 x 40.4 cm (21.1 x 13.9 x 15.9 in.)
Weight	11.8 kg (26 lb)

Software

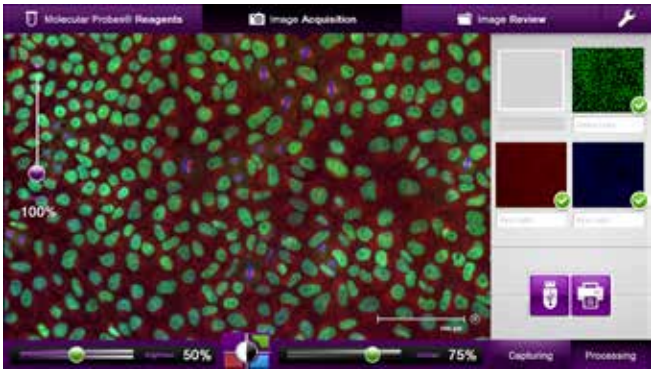
The Invitrogen™ FLoid™ Imaging Station makes capturing and processing three-color fluorescence images as easy as taking pictures on your smartphone. Simply follow the icons on the intuitive user interface and capture publication-quality images in a matter of minutes right at the benchtop. All images acquired can be saved in JPEG, BMP, TIFF, and PNG formats.

Applications

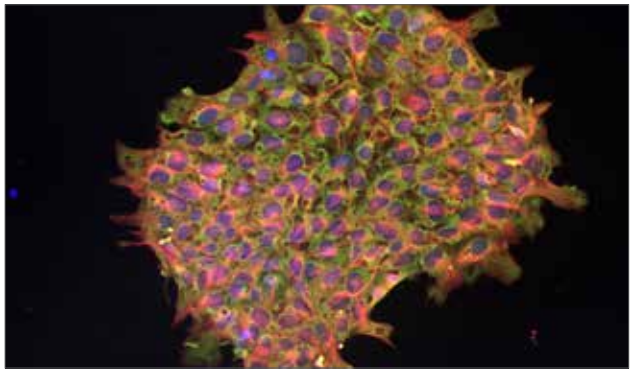
The FLoid Imaging Station can be used in a broad range of applications, including routine fluorescence (GFP/RFP) tissue culture visualization and imaging, and serves as an excellent entry instrument for fluorescence microscopy. The FLoid Imaging Station is a perfect complement to tissue culture rooms, enabling quick visualization of GFP- and/or RFP-expressing cells.

Key software features:

- One-click, multichannel overlay
- Icon-based operation
- Multiple language options
- Digital zoom



Screenshot of the EVOS FLoid image processing software.



Human induced pluripotent stem cells, 20x; light cubes: GFP, RFP, and DAPI.

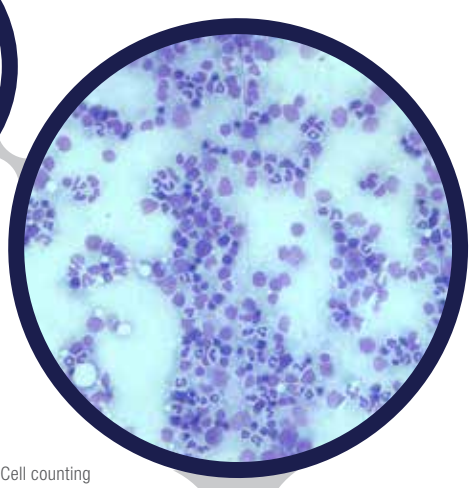
EVOS XL Core Imaging System

Compact, simple transmitted-light system perfect for use in the cell culture hood or tissue culture facility

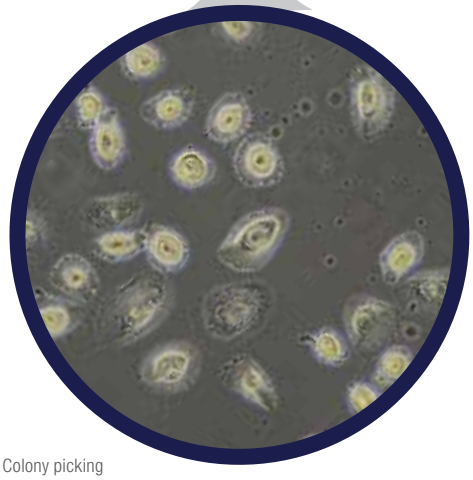
Features

- Fits inside all culture hoods
- Cost-effective and user-friendly
- Easy installation; no maintenance, assembly, alignment, or calibration
- Removable mechanical stage for precise imaging

Mechanical stage (optional)



Cell counting



Colony picking

System highlights

Hardware	
Illumination	LED for transmitted light
Contrast methods	Transmitted light (bright-field and phase-contrast)
Objective turret	4-position (front-mounted) control
Condenser working distance	60 mm
Stage	Choice of fixed or mechanical stage Mechanical stage has x-y axis controls and vessel holder framework
LCD display	12.1 in. high-resolution color monitor with adjustable tilt
Camera	High-sensitivity CMOS color camera
Output ports	2 USB ports
Power supply	AC adaptor
Dimensions (H x D x W)	55.3 x 40.6 x 31.8 cm (21.0 x 16.0 x 12.5 in.)
Weight	With fixed stage: 9.1 kg (20.1 lb) With mechanical stage: 10.0 kg (22.0 lb)

Software

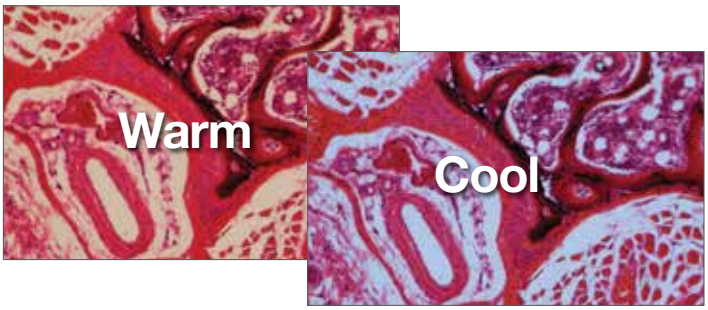
Integrated software is a key component of this all-in-one system. Our software includes a variety of features, such as color temperature control. All images acquired can be saved in JPEG, BMP, and TIFF formats.

Key software features:

- Easy-to-use interface
- Adjustable saturation and contrast
- Color temperature control (warm vs. cool)

Applications

The Invitrogen™ EVOS™ XL Core Imaging System is the ideal tissue culture microscope. Highly portable, it is perfect for imaging in the tissue culture hood as well as on the lab bench for routine cell and tissue culture imaging, and stem cell applications.



Mouse tail cross-section, 20x objective.

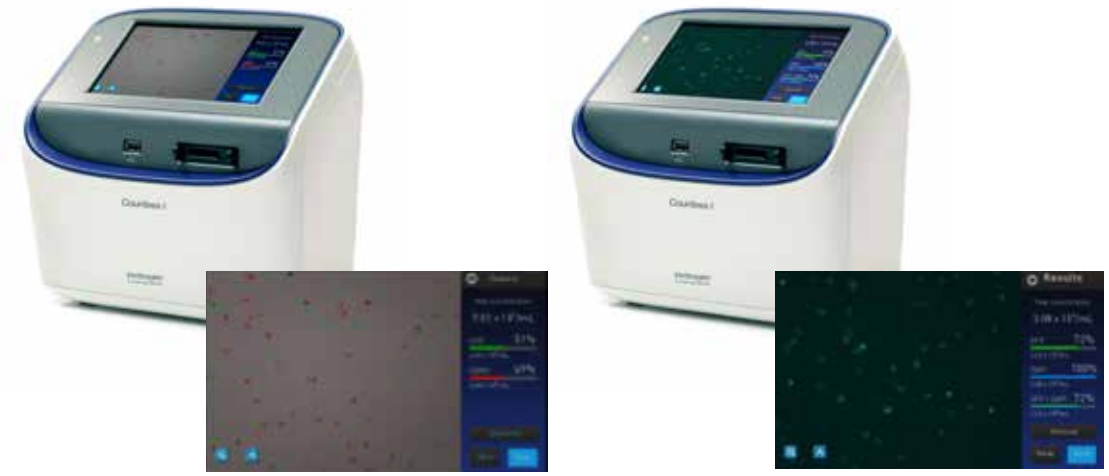
Countess II automated cell counters

Advanced technology at an affordable price

Accurate counts in as little as 10 seconds
We offer two high-performance automated cell counters designed to meet the needs of any lab. The Invitrogen™ Countess™ II and Countess™ II FL Automated Cell Counters contain advanced autofocusing and counting algorithms to allow you to quickly and accurately count cells, while avoiding user variation associated with counting.

Both automated cell counters offer the following features:

- **Accuracy**—autofocus and auto-lighting minimize user-to-user variability
- **Speed**—results in as little as 10 seconds
- **Convenience**—built-in dilution calculator and ability to save up to 10 user profiles



Feature	Countess II counter	Countess II FL counter
Counting mode	Bright-field channel	Bright-field channel plus two optional, user-changeable fluorescence channels
Slides	Disposable slides	Reusable and disposable slides
Counting time	As little as 10 seconds	
Focus	Autofocus with manual focus option	
User profiles	Customize and save up to 10 user profiles	
User interface	Intuitive touchscreen with ability to use a mouse, if desired	

"It outperformed all other suppliers' models that we tried."

—Michael DaCosta, The Jackson Laboratory

Reduced variability improves accuracy

The autofocus feature of Countess II instruments works by analyzing more than 30 focal planes, then selecting the plane with the best focal quality. This helps ensure that any variance from sample to sample, user to user, and slide to slide is minimized. Results are based on the optimal focal plane to enable highly accurate cell and viability counts. The Results view shown below allows quick visual confirmation of cells as being live or dead.

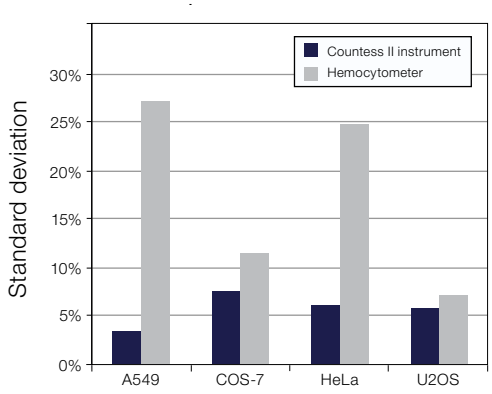
Peripheral blood mononuclear cells (PBMCs) counted using the Countess II Automated Cell Counter. Counting and viability measurement is done using trypan blue staining.

Reusable or disposable slides available

The Countess II FL Automated Cell Counter was designed to work with a reusable glass slide to help significantly reduce the long-term consumable costs associated with automated counting. Convenient disposable slides are also available.

Countess II FL counter | Reusable slide | An end to manual counting

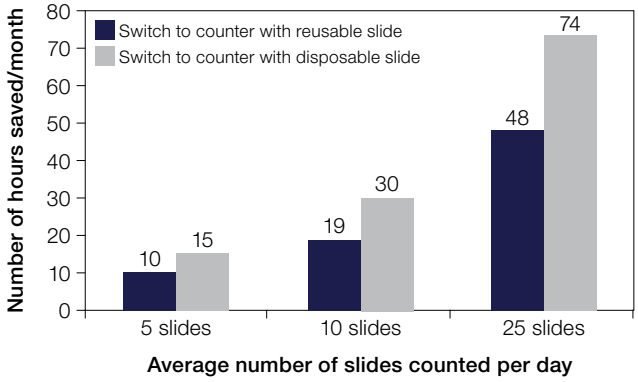
The ability of the Countess II cell counters to gate cells based on cell size, brightness, and circularity using quantitative measurements rather than operator judgment also helps to reduce subjectivity, and allows increased repeatability between samples and users.



Count variability using a hemocytometer compared to using a Countess II instrument. Identical samples of A549, COS-7, HeLa, and U2OS cells were counted by three different operators using a Countess II cell counter and then manually with a hemocytometer and microscope. The user-to-user variability for the hemocytometer is much higher than for the Countess II instrument.

Time savings

The additional time it takes to manually count cells compared to counting with the Countess II Automated Cell Counters is often overlooked as an added cost. An individual counting five slides per day (two samples per slide) can save ~10 hours per month by switching to an automated counter with a reusable slide. This additional time can be applied to other activities in the lab, resulting in a significant advantage when switching from manual to automated cell counting.



Estimated hours saved per month when switching from manual cell counting to using an automated cell counter.

Fluorophore selection guide

Use the selection guide below to choose the Invitrogen™ dye that best matches your light source and experimental needs.

	EVOS DAPI Light Cube (AMEP4650) Ex: 357/44 nm; Em: 447/60 nm	EVOS GFP Light Cube (AMEP4651) Ex: 470/22 nm; Em: 510/42 nm
Apoptosis	Annexin V, Alexa Fluor 350 Conjugate (A23202)	CellEvent Caspase 3/7 Green (C10423) Click-iT Plus TUNEL Assay, Alexa Fluor 488 (C10617) Image-iT LIVE Green Caspase-3 and -7 Detection Kit (I35106)
Autophagy		Premo Autophagy Tandem Sensor RFP-GFP-LC3B Kit (P36239) Premo Autophagy Sensor LC3B-GFP (P36235) Premo Autophagy Sensor GFP-p62 Kit (P36240)
Cell tracing and tracking	CellTrace Calcein Blue, AM (C34853) CellTracker Blue CMAC Dye (C2110) CellTracker Blue CMF_2HC Dye (C12881)	CellTrace Calcein Green, AM (C34852) CellTracker Green CMFDA Dye (C7025) Vybrant DiO Cell-Labeling Solution (V22886)
Cytoskeleton stains	Alexa Fluor 350 Phalloidin (A22281)	Alexa Fluor 488 Phalloidin (A12379) CellLight Actin-GFP (C10582) CellLight Tubulin-GFP (C10613) ActinGreen 488 ReadyProbes Reagent (R37110)
Endocytosis		CellLight Early Endosomes-GFP (C10586) pHrodo Green Dextran, 10,000 MW (P35368) LysoTracker Green DND-26 (L7526)
Neuronal tracing and staining	Alexa Fluor 350 Hydrazide (A10439)	NeuroTrace 500/525 Green Fluorescent Nissl Stain (N21480) DiO (D275) Alexa Fluor 488 Dextran (D22910)
Nuclear stains	DAPI (D1306) Hoechst 33342 (H3570) NucBlue Fixed Cell ReadyProbes Reagent (R37606)	SYTO 9 Green Fluorescent Nucleic Acid Stain (S34854) SYTOX Green Nucleic Acid Stain (S7020) CellLight Nucleus-GFP (C10602)
Oxidative stress		CellROX Green Reagent (C10444) CM-H_2DCFDA (C6827) DAF-FM Diacetate (D23844)
Phagocytosis		pHrodo Green *E. coli* BioParticles Conjugate (P35366) pHrodo Green *S. aureus* BioParticles Conjugate (P35367) pHrodo Green Zymosan BioParticles Conjugate (P35365)
Plasma membrane stains	Wheat Germ Agglutinin, Alexa Fluor 350 Conjugate (W11263)	Wheat Germ Agglutinin, Alexa Fluor 488 Conjugate (W11261) CellMask Green Plasma Membrane Stain (C37608) CellLight Plasma Membrane-GFP (C10607)
Proliferation		Click-iT Plus EdU Alexa Fluor 488 Imaging Kit (C10637)
Viability	ReadyProbes Cell Viability Kit, Blue/Green (R37609) ReadyProbes Cell Viability Kit, Blue/Red (R37610)	LIVE/DEAD Viability/Cytotoxicity Kit (L3224) LIVE/DEAD Cell Imaging Kit (488/570) (R37601) ReadyProbes Cell Viability Kit, Blue/Green (R37609)

Find out more at **thermofisher.com/microscopes**

EVOS RFP Light Cube (AMEP4652) Ex: 531/40 nm; Em: 593/40 nm	EVOS Texas Red Light Cube (AMEP4655) Ex: 585/29 nm; Em: 624/40 nm	EVOS Cy5 Light Cube (AMEP4656) Ex: 628/40 nm; Em: 693/40 nm
Annexin V, Alexa Fluor 555 Conjugate (A35108) Image-iT LIVE Red Caspase-3 and -7 Detection Kit (I35102) Image-iT LIVE Red Poly Caspases Detection Kit (I35101)	Click-iT Plus TUNEL Assay, Alexa Fluor 594 Dye (C10618) Annexin V, Alexa Fluor 594 Conjugate (A13203)	Click-iT Plus TUNEL Assay, Alexa Fluor 647 Dye (C10619) Annexin V, Alexa Fluor 647 Conjugate (A23204)
Premo Autophagy Tandem Sensor RFP-GFP-LC3B Kit (P36239) Premo Autophagy Sensor LC3B-RFP (P36236) Premo Autophagy Sensor RFP-p62 Kit (P36241)		
CellTracker Orange CMRA Dye (C34551) CellTracker Orange CMTMR Dye (C2927) Vybrant DiI Cell-Labeling Solution (V22885)	CellTracker Red CMTPX Dye (C34552)	CellTracker Deep Red Dye (C34565) Vybrant DiD Cell-Labeling Solution (V22887)
Alexa Fluor 555 Phalloidin (A34055) CellLight Actin-RFP (C10583) CellLight Tubulin-RFP (C10614) ActinRed 555 ReadyProbes Reagent (R37112)	Alexa Fluor 594 Phalloidin (A12381)	Alexa Fluor 647 Phalloidin (A22287)
CellLight Early Endosomes-RFP (C10587) pHrodo Red Dextran, 10,000 MW (P10361) pHrodo Red Epidermal Growth Factor (EGF) Conjugate (P35374)	LysoTracker Red DND-99 (L7528)	LysoTracker Deep Red (L12492)
DiI (D282) Alexa Fluor 555 Dextran (D34679) Tetramethylrhodamine dDextran (D1817)	Alexa Fluor 594 Hydrazide (A10438) Alexa Fluor 594 Biocytin (A12922) Alexa Fluor 594 Dextran (D22913)	DiD (D7757) Alexa Fluor 647 Hydrazide (A20502) Alexa Fluor 647 Dextran (D22914)
SYTO 82 Orange Fluorescent Nucleic Acid Stain (S11363) CellLight Nucleus-RFP (C10603)		TO-PRO-3 Iodide (T3605) HCS NuclearMask Deep Red Stain (H10294)
CellROX Orange Reagent (C10443) Dihydroethidium (D11347)	MitoSOX Reagent (M36008)	CellROX Deep Red Reagent (C10422)
pHrodo Red *E. coli* BioParticles Conjugate (P35361) pHrodo Red *S. aureus* BioParticles Conjugate (A10010) pHrodo Red Zymosan BioParticles Conjugate (P35364)		
Wheat Germ Agglutinin, Alexa Fluor 555 Conjugate (W32464) CellMask Orange Plasma Membrane Stain (C10045) CellLight Plasma Membrane-RFP (C10608)	Wheat Germ Agglutinin, Alexa Fluor 594 Conjugate (W11262)	Wheat Germ Agglutinin, Alexa Fluor 647 Conjugate (W32466) CellMask Deep Red Plasma Membrane Stain (C10046)
Click-iT Plus EdU Alexa Fluor 555 (C10638)	Click-iT Plus EdU Alexa Fluor 594 Imaging Kit (C10639)	Click-iT Plus EdU Alexa Fluor 647 Imaging Kit (C10640)
LIVE/DEAD Viability/Cytotoxicity Kit (L3224) ReadyProbes Cell Viability Kit, Blue/Red (R37610)	LIVE/DEAD Cell Imaging Kit (488/570) (R37601)	NucRed Dead 647 ReadyProbes Reagent (R37113)


EVOS FL Auto 2 Imaging System

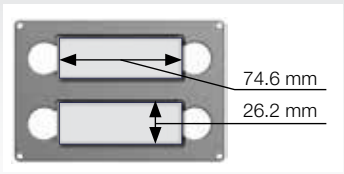

EVOS M5000 Cell Imaging System


Countess II FL Automated Cell Counter

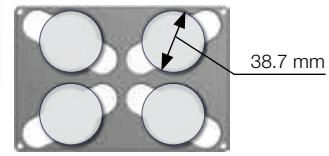
EVOS vessel holders and stage plates

All models

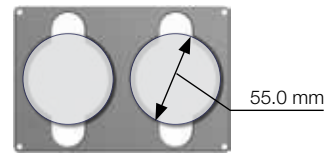
AMEPVH001
Holds two 25 mm x 75 mm standard microscope slides, chamber slides, etc.



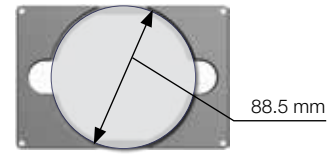
AMEPVH002
Holds four 35 mm petri dishes



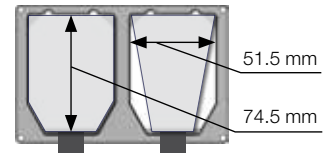
AMEPVH003
Holds two 60 mm petri dishes



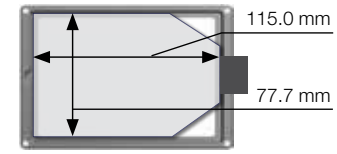
AMEPVH004
Holds one 100 mm petri dish



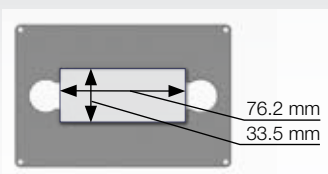
AMEPVH005
Holds two 25 cm² flasks; rectangular or triangular



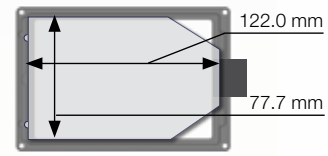
AMEPVH006
Holds one Nunc T-75 flask; 75 cm²



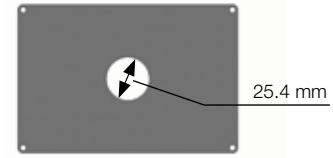
AMEPVH007
Holds one hemocytometer



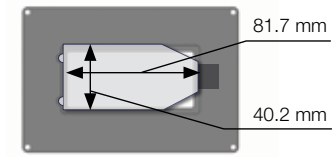
AMEPVH008
Holds one Greiner T-75 flask; 75 cm²



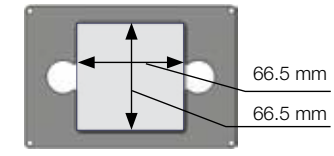
AMEPVH009
Universal stage insert



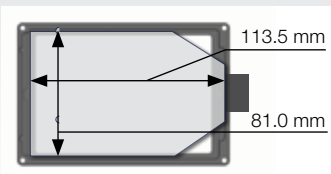
AMEPVH010
Holds one BD/Greiner T-25 flask; 25 cm²



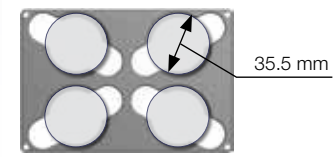
AMEPVH011
Holds one Nunc/SPL IVF 4-well dish



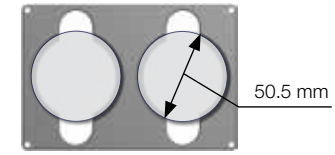
AMEPVH012
Holds one SPL T-75 flask; 75 cm²



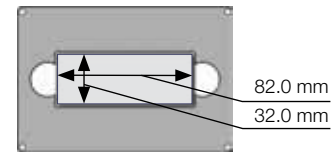
AMEPVH013
Holds four Ibidi 35 mm petri dishes



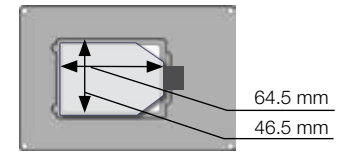
AMEPVH014
Holds two Ibidi 50 mm petri dishes



AMEPVH017
Holds one KOVA Glasstic slide 10



AMEPVH018
Holds one Nunc T-25 flask; 25 cm²

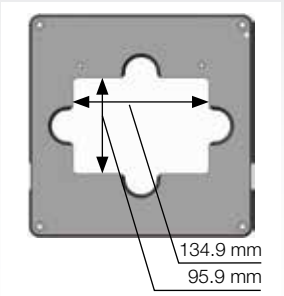


Custom vessel holders

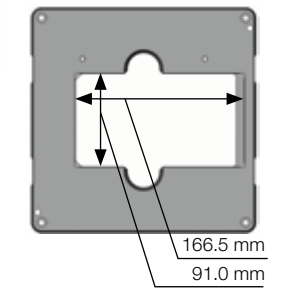
Need a vessel holder to accommodate your specialized plate, slide, culture dish, or flask? Contact us to create a specialty vessel holder for your EVOS imaging system.

FL and XL mo

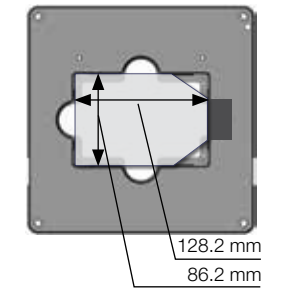
AMEP4684
Stage plate for heating tray, Tokai Hit™ MATS-UAXKD-D



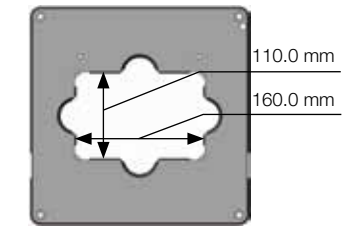
AMEP4685
Stage plate for heating stage, BioFlux plate by Fluxion



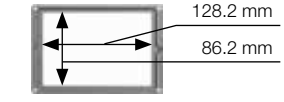
AMEP4686
Stage plate for multiwell vessels; also holds one Corning T-75 flask



AMEP4691
Stage plate with 110 x 160 mm opening (Use with AMEP4692 for standard sizes)

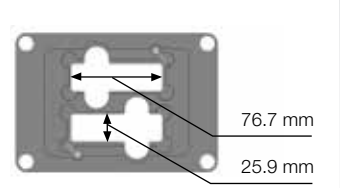


AMEP4692
Stage plate adaptor with 110 x 160 mm opening for standard size

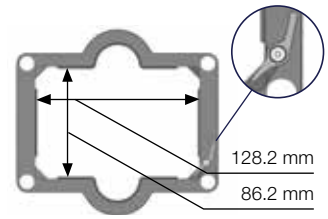


FL Auto 2

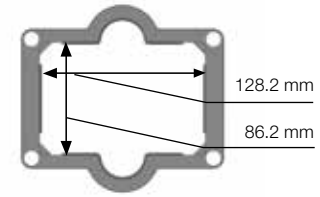
AMEPVH021
Securely holds two 25 mm x 75 mm standard microscope slides, chamber slides, etc.



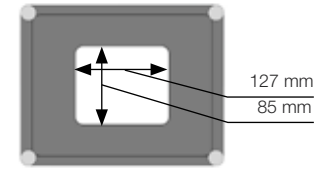
AMEPVH022
Intermediate plate for automated stage; securely holds multiwell vessels with convenient lever adaptor for AMEPVH001 and AMEPVH009



AMEPVH023
Holds multiwell vessels
Adaptor for AMEPVH001 and AMEPVH009

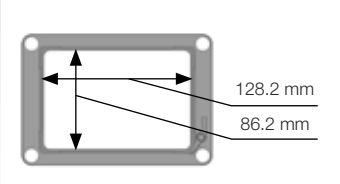


AMEPVH027
Master plate, large format, automated stage

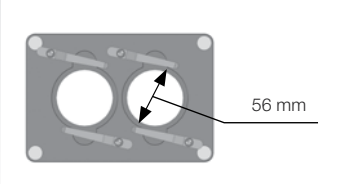


Onstage Incubator

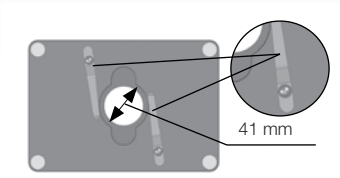
AMEPVH028
Securely holds one multiwell plate



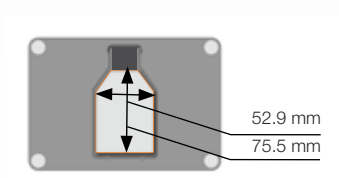
AMEPVH032
Securely holds two 60 mm petri dishes



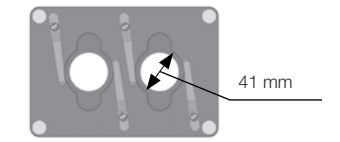
AMEPVH029
Securely holds one 35 mm petri dish



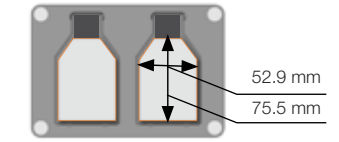
AMEPVH033
Holds one T-25 flask



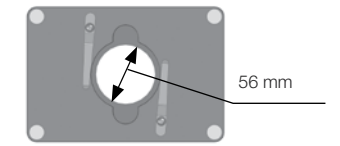
AMEPVH030
Securely holds two 35 mm petri dishes



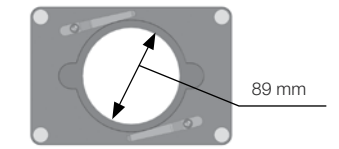
AMEPVH034
Holds two T-25 flasks



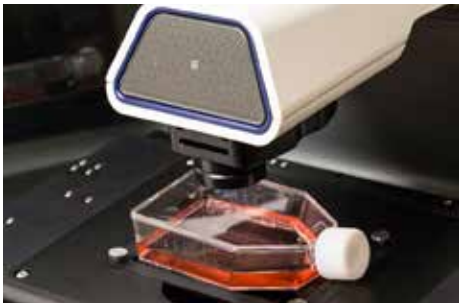
AMEPVH031
Securely holds one 60 mm petri dish

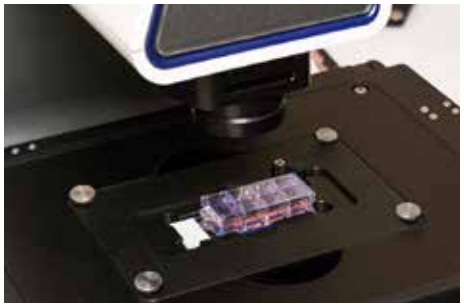


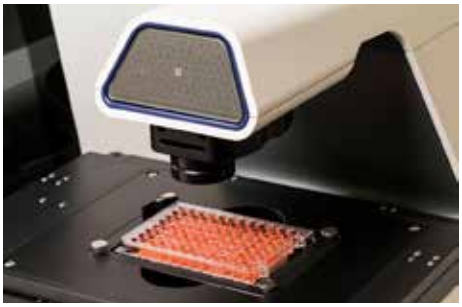
AMEPVH037
Securely holds one 100 mm petri dish



See a complete list of available vessel holders and stage plates at **thermofisher.com/evosvesselholders**







EVOS objectives

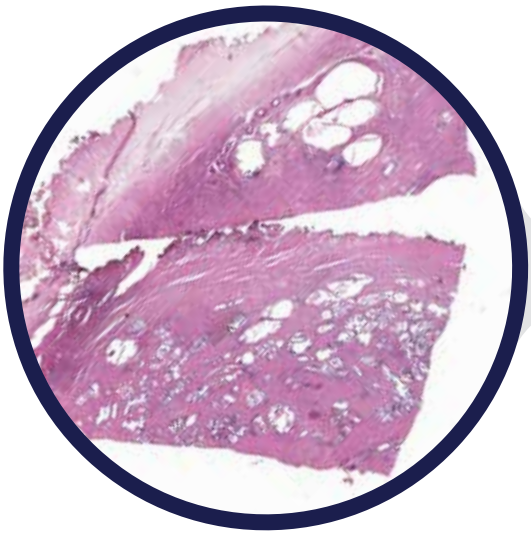
Plan achromat: Perfect for general applications; color and focus have standard correction compared to apochromat and fluorite objectives.

Plan achromat								
Magnification	**NA***	**WD (mm)****	**Bright-field**	**Phase**	**Long working distance**	**Coverslip-corrected**	**Oil**	**Cat. No.**
2x	0.06	5.10	•		•			AMEP4631
4x	0.13	16.90	•	•	•			AMEP4632
10x	0.25	6.90	•	•	•			AMEP4633
20x	0.40	6.80	•	•	•			AMEP4634
40x	0.65	3.10	•	•	•			AMEP4635
50x	0.95	0.19	•			•	•	AMPFOP050
100x	1.25	0.15	•			•	•	AMPFOP100

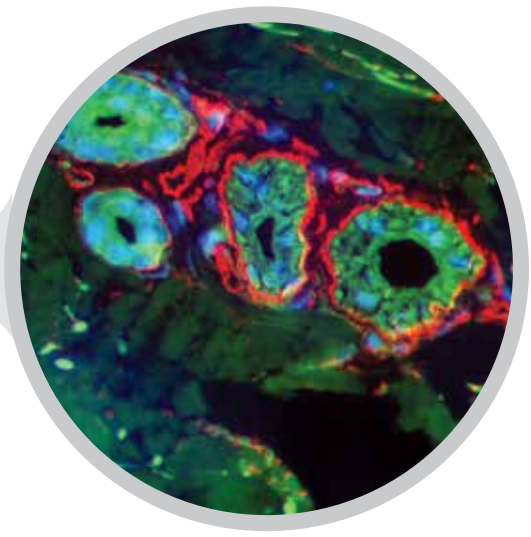
* NA = numerical aperture, ** WD = working distance.

Plan fluorite: Excellent resolution resulting in bright fluorescence signal and high-contrast imaging; helps reduce optical aberrations; color and focus have a higher level of correction.

Plan fluorite								
Magnification	**NA**	**WD (mm)**	**Bright-field**	**Phase**	**Long working distance**	**Coverslip-corrected**	**Oil**	**Cat. No.**
4x	0.13	19.70	•		•			AMEP4622
	0.13	16.90	•	•	•			AMEP4680
10x	0.30	8.30	•		•			AMEP4623
	0.25	9.20	•	•	•			AMEP4681
20x	0.45	7.10	•		•			AMEP4624
	0.40	3.10	•	•	•			AMEP4682
	0.50	2.50	•			•		AMEP4698
40x	0.65	2.80	•		•			AMEP4625
	0.65	1.60	•	•	•			AMEP4683
	0.75	0.72	•			•		AMEP4699
	1.30	0.20	•			•	•	AMEP4735
60x	0.75	2.20	•		•			AMEP4626
100x	1.28	0.21	•			•	•	AMEP4700



Prostate cross-section, 10x objective



Rat epidermis, 40x objective

Plan apochromat: Highest levels of resolution, fluorescence brightness, contrast, and chromatic correction compared to achromat and fluorite objectives.

Plan apochromat								
Magnification	**NA**	**WD (mm)**	**Bright-field**	**Phase**	**Long working distance**	**Coverslip-corrected**	**Oil**	**Cat. No.**
1.25x	0.04	5.11	•		•			AMEP4736
2x	0.08	6.22	•		•			AMEP4751
4x	0.16	13.00	•		•			AMEP4752
10x	0.40	3.10	•			•		AMEP4753
20x	0.75	0.65	•			•		AMEP4734
40x	0.95	0.18	•			•		AMEP4754
60x	1.42	0.15	•			•	•	AMEP4694
100x	1.40	0.13	•			•	•	AMEP4733

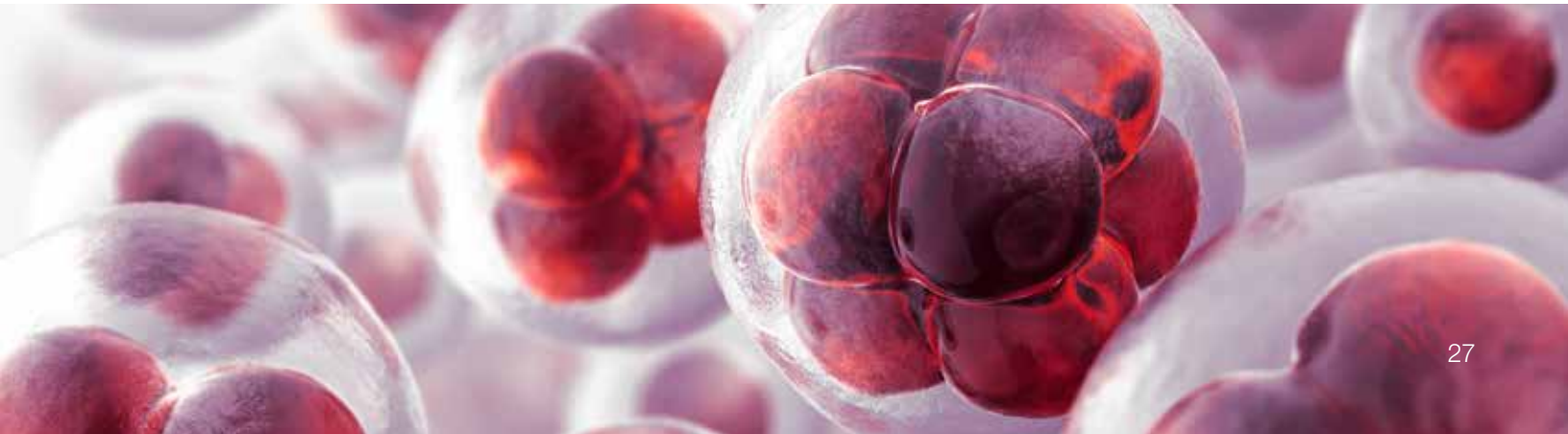
Long working distance vs. coverslip-corrected

Long working distance

Optimized for use through vessels with nominal wall thickness of 0.9–1.5 mm (slides, flasks, microtiter dishes, etc.).

Coverslip-corrected

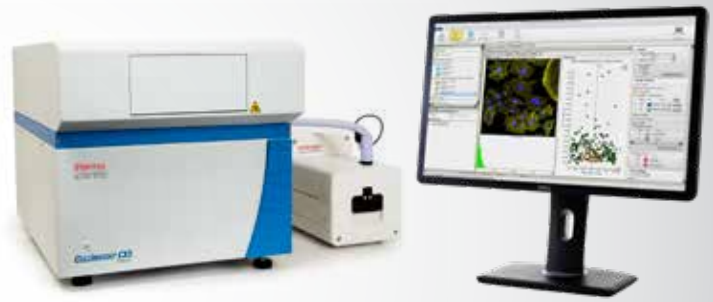
Optimized for use with #1.5 coverslips (approximately 0.17 mm thick). Have a higher magnification-to-numerical aperture (NA) ratio and provide higher resolution compared to long working distance.



CellInsight high-content analysis solutions

The Thermo Scientific™ CellInsight™ CX7 LZR HCA Platform offers a more powerful and integrated way to develop and automate high- content assays. With laser illumination, the CellInsight LZR HCA Platform enables researchers to image faster in both wide-field and confocal modes, with deeper penetration into the specimen.

The Thermo Scientific™ CellInsight™ CX7 HCA Platform offers an integrated way to develop and automate high-content assays using a combination of 5-color bright-field and 7-color fluorescence imaging in confocal or wide-field modes.



The Thermo Scientific™ CellInsight™ CX5 HCS Platform is a fast, simple-to-operate, automated cellular imaging and analysis benchtop platform designed for quantitative microscopy. The CellInsight CX5 HCS Platform offers a cost-effective, but powerful way to quickly automate quantitative cellular and subcellular imaging.

High-content analysis (HCA), also known as high-content screening (HCS), image cytometry, quantitative cell analysis, or automated cell analysis, is an automated method that is used to identify substances that alter the phenotype of a cell in a desired manner.

Using a combination of established technologies, HCA can address both cellular-level intensity and morphological measurements. With sufficient resolution for subcellular detection, automated detection and phenotyping can be achieved with intact, fixed, or live cells. The table on the next page describes some of the commonly used cell-based assays in laboratories.

Features and functionality

- **Precise image capture**—the highly sensitive, 14-bit cooled CCD camera with an enlarged 2,208 x 2,208 pixel array captures quantitative data with high quantum efficiency across the spectrum
- **Rapid data analysis**—Thermo Scientific™ HCS Studio™ Cell Analysis Software analyzes your images in real time, so that you collect all the data you need to make decisions that count
- **Live-cell imaging**—extended imaging sessions rely on the provision of a controlled environment for the live cells under study. The Onstage Incubator allows precise control of temperature, humidity, and CO_2 levels so that you may observe and measure biological activity and changes over time. Data gathered from longer-term imaging studies are the basis of quantitative analysis studies, especially when combined with Thermo Scientific™ High-Content Screening (HCS) Studio Software for increased statistical power.

HCS Studio Cell Analysis Software

Intuitive interface and intelligent design
The HCS Studio Cell Analysis Software is the engine behind its HCA platforms. This intelligent data acquisition software analyzes just enough cells for statistical relevance.

- Icon-based guidance, accessible to novice users
- Fully customizable for experienced users
- Thermo Scientific™ Cellomics™ Spot Detector BioApplication software tools for assay development and screening
- Scalable to many thousands of images

Analysis or screening
Whether you are analyzing a few slides to answer basic research questions or screening thousands of samples in a systems biology study, we can offer you the platform of choice to meet your application's needs.

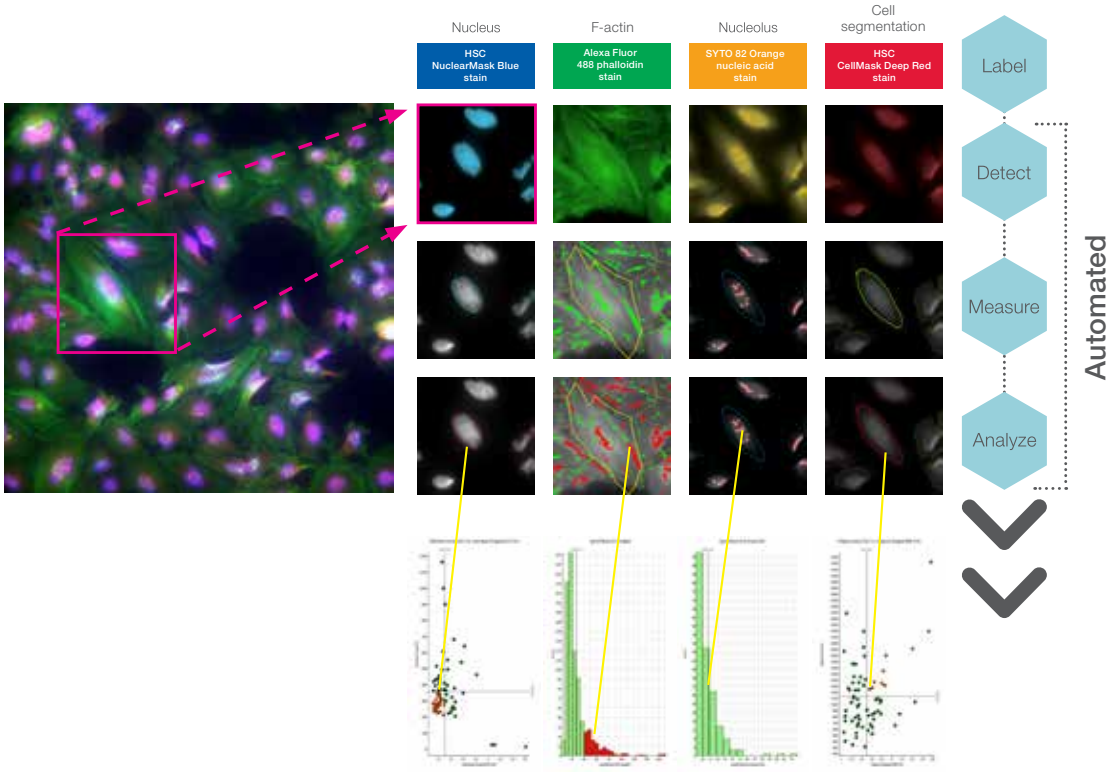
Go from image collection to tabulated results and population statistics—and back again, because the data always come back to cells.

With this software, you can:

- Link data seamlessly to both image and protocol
- Move from tabulated data to view cells, wells, or fields

Assay performance
With HCS Studio Cell Analysis Software, you can be confident of robust assay performance. Rank your assay parameters based on Z-prime before starting a screen and then adjust your "stop criteria" to collect only the data you need for statistical significance.

Application area	Example assays
Morphology	Subcellular to multicellular changes, cytoskeletal changes, cell differentiation, neurite outgrowth
Signaling	Transcription factor activation, receptor trafficking, phosphorylation, cell-cell interactions
Expression	RNA and protein expression
Cytotoxicity	Apoptosis vs. necrosis, genotoxicity, oxidative stress, organelle status
Proliferation	Cell count, cell viability, cell cycle



thermofisher.com/hcs

Microplate readers

Find the perfect reader for your lab

Our dedicated and multimode Thermo Scientific™ microplate readers provide flexibility, performance, and ease of use for virtually any microplate assay. Whether you need to measure absorbance, fluorescence, luminescence, time-resolved fluorescence, or AlphaScreen™ assays—or you think you'll need to expand capabilities in the future—we offer a microplate reader solution tailored to your lab. See key specifications for the Thermo Scientific plate reader family in the table below.

Key features for accurate, efficient, and reliable measurements

Every reader in this family features auto-calibration every time you power up the instrument, and easy export to Microsoft™ Excel™. With additional advantages like robot compatibility, unlimited licenses for Thermo Scientific™ SkanIt™ Software, and an extensive online library of ready-to-use protocols, you can save time and maximize instrument up-time, giving you the results you need to help you answer big scientific questions.

Considerations	Multiskan FC	Multiskan Sky	Fluoroskan	Luminoskan	Fluoroskan FL	Varioskan LUX
	Photometer	Scanning photometer	Fluorometer	Luminometer	Fluorometer/ luminometer	Scanning multimode reader
Applications	Absorbance		Fluorescence	Luminescence	Fluorescence, luminescence	Absorbance, fluorescence, optional: time-resolved fluorescence (TRF), luminescence, AlphaScreen
Wavelength range (nm)	340–850	200–1,000	Excitation: 320–700; emission: 360–800	270–670	Excitation: 320–700; emission: 360–670	Absorbance/fluorescence excitation: 200–1,000 nm Fluorescence emission: 370–840 nm Luminescence: 360–670 nm TRF excitation: fixed to 334 nm (spectral scanning 200–840 nm) TRF emission: 400–700 nm (spectral scanning 270–840 nm) AlphaScreen excitation: fixed to 680 nm AlphaScreen emission: 400–660 nm
Wavelength selection	Filters	Monochromator	Filters	Not required for most applications Filters can be used when necessary	Filters	Monochromator for UV/Vis absorbance and fluorescence intensity; Filters for luminescence, TRF, AlphaScreen
Plate format	96 wells (384 wells optional)	µDrop plate/96/384 wells	6–384 wells	6–384 wells	6–384 wells	6–1,536 wells (fluorometry, TRF, luminometry, AlphaScreen) µDrop plate/6–384 wells (absorbance)
Incubation	Optional	Yes	Yes	Yes	Yes	Yes
Shaking	Yes	Yes	Yes	Yes	Yes	Yes
Dispensers	No	No	Optional (to three)*	Optional (to three)*	Optional (to three)*	Optional (to two)
Top/bottom reading	NA	NA	Top/bottom**	Top	Top/bottom**	Top (standard) Bottom (optional)**
Cuvettes	No	Optional	No	No	No	With µDrop plate
Gas control module	No	No	No	No	No	Optional
						

* Third dispenser requires additional installation

** Instruments with bottom-read capabilities feature multi-location reads per well.

thermofisher.com/platereaders

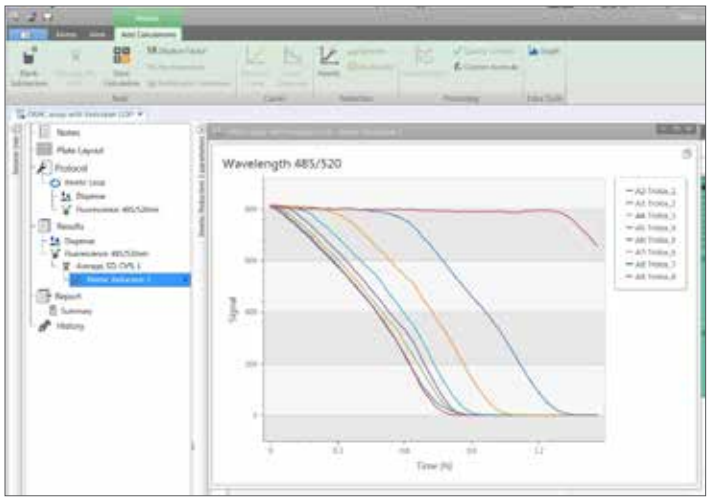
SkanIt Software

Intuitive setup with SkanIt Software

Microplate readers with so many automated features require a truly user-friendly interface. Enter the newly designed 5th generation SkanIt Software. The easy-to-navigate interface will guide you through the measurement process and help you get the results you need. SkanIt Software is available in two editions: Research Edition for scientists working in life science research and Drug Discovery Edition that provides features to help you comply with the requirements of FDA 21 CFR Part 11.

How does SkanIt Software ease microplate reading?

- Extensive library of ready-made protocols with a truly user-friendly interface
- Intuitive user interface simplifies measurement setup
- Virtual pipette tool makes it easy to define samples-to-plate layout
- Visual tools and instructional pictures guide users through every step
- Built-in calculation options ease data processing
- Single-click data export to Microsoft™ Excel™ software
- Several file formats for data export: *.xlsx, *.pdf, *.xml, and *.txt
- Manual or automatic data export to any location
- Automatic emailing of result report after run is complete
- No limit on the number of licenses; install the software on as many computers as needed
- No annual fee to own the software
- Measurement data continuously saved to the database, helping prevent data loss due to interruptions such as power outage or accidental aborting



The intuitive user interface of SkanIt Software allows for straightforward setup.

Varioskan LUX Multimode Microplate Reader highlight

Designed for bioscience researchers with a wide variety of needs, the Thermo Scientific™ Varioskan™ LUX multimode microplate reader provides a flexible range of measurement modes. The instrument simplifies measurement setup with automatic dynamic range selection; its smart safety controls ease your workflow to help you avoid experimental errors. The Varioskan LUX multimode reader raises the bar for reliability and ease. The Varioskan LUX reader offers:

- Modular, upgradable system for customization
- Five measurement modes: endpoint, kinetic, spectral, multipoint, and kinetic spectra
- Spectral scanning for assay optimization
- Simultaneous dispensing and measurement of fast reactions right from the start
- Integrated gas module for atmospheric control of CO_2 and O_2 for cell-based assays

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Educational resources

Our award-winning print and online magazine highlights the latest breakthroughs in cell biology, featuring new technologies and products.

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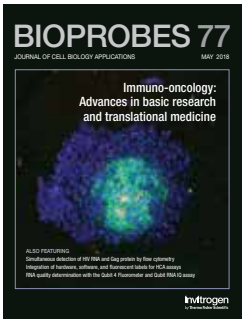

The most complete reference guide on fluorescent labeling and detection—*The Molecular Probes Handbook—A Guide to Fluorescent Probes and Labeling Technologies*—describes over 3,000 reagents and kits representing a wide range of Invitrogen™ labeling and detection products.

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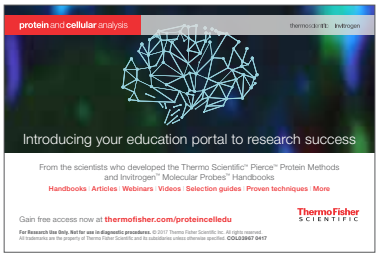

Ordering information

Product	Cat. No.
Countess II Automated Cell Counter	AMQAX1000
Countess II FL Automated Cell Counter	AMQAF1000
EVOS FL Auto 2 Imaging System	AMAFD2000
EVOS Onstage Incubator	AMC1000
EVOS M5000 Cell Imaging System	AMF5000
EVOS FLoid Imaging System	4471136
EVOS XL Core Imaging System	AMEX1000
CellInsight CX5 High Content Analysis Platform	CX51110
CellInsight CX7 High Content Analysis Platform	CX7A1110
CellInsight CX7 LZR High Content Analysis Platform	CX7A1110LZR
HCA Onstage Incubator for CellInsight CX5 instruments	NX5LIVE002
HCA Onstage Incubator for CellInsight CX7 and CX7 LZR instruments	NX7LIVE001
Varioskan LUX Multimode Microplate Reader	VLBL00D0
Multiskan Sky Microplate Spectrophotometer	51119500

Find out more at **thermofisher.com/cellimaging**

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