

Objectively precise, incredibly easy

The new EVOS M3000 Imaging System accurately measures cell confluency for you in real time



The Invitrogen™ EVOS™ M3000 Imaging System is a fully integrated digital microscope with brightfield, phase contrast, fluorescence, and color imaging capabilities. It simplifies the cell culture workflow using innovative pretrained machine learning models to report confluency measurements in real time. The built-in CMOS camera reliably produces stunning, high-quality cell images and videos.

Benefits

- **Cell confluency data in seconds**—built-in automated real-time image analysis for measuring cell confluency (Figure 1)
- **No training required**—simple user interface with touchscreen display
- **Space-saving design**—smallest footprint among the family of Invitrogen™ EVOS™ imaging systems; fits easily on the lab bench or in a cell culture hood
- **Versatile**—capture images in brightfield, phase contrast, color imaging, and fluorescence
- **Flexible**—compatible with Invitrogen™ EVOS™ objectives (1.25–60X) and EVOS™ light cubes
- **Connectivity**—network-capable instrument facilitates seamless data transfer, storage, and collaboration, enhancing productivity and data management

Real-time confluency tool

The real-time confluency tool of the EVOS M3000 Imaging System will report confluency percentage seen in the field of view in under one second, on average, without requiring any image capture, making it well suited for eliminating user bias in routine cell culture. This proprietary bioapplication displays high concordance with other validated methods for measuring confluency, and it comes standard on all EVOS M3000 systems.

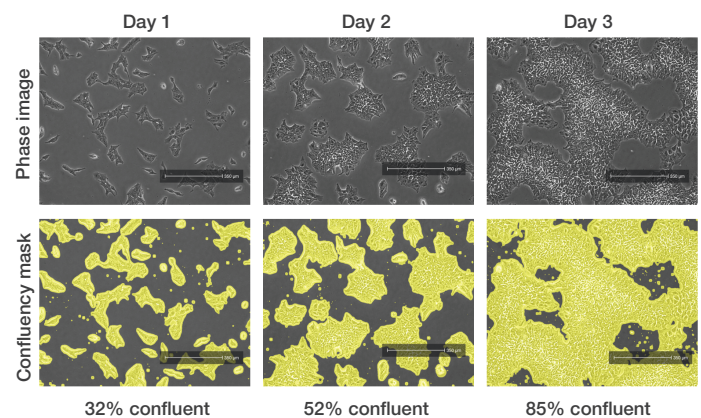


Figure 1. Induced pluripotent stem cells imaged over time with the EVOS M3000 system. Human fibroblast-derived induced pluripotent stem cells were cultured on a vitronectin-coated 6-well plate in [Gibco™ Essential 8™ Flex Medium](#) for 3 days. Cells were imaged with the EVOS M3000 system under phase microscopy with and without the automatically generated confluency mask and measurement.

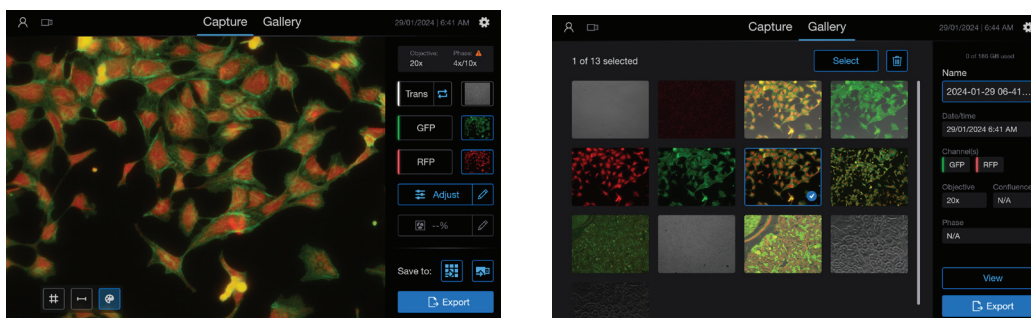


Figure 2. Powerful onboard software with image processing tools built in. The user-friendly EVOS M3000 interface allows for effortless image capture in transmitted light or fluorescence mode (left), while also facilitating the exploration of saved images through the image gallery feature (right).

Table 1. Highlights of the EVOS M3000 Imaging System.

Hardware	Details
Illumination	Adjustable-intensity LED (>50,000-hour life per light cube)
Imaging	2-color fluorescence, transmitted light, and color imaging modes
Contrast methods	Epifluorescence and transmitted light (for brightfield and phase contrast applications)
Objective turret	4-position control
Fluorescence channels	Simultaneously accommodates up to 2 interchangeable fluorescent light cubes
Condenser	60 mm long working distance condenser, 4-position turret with a clear aperture and 3-phase annuli
Stage	Fixed X-Y scanning stage with travel range of 179 mm x 229 mm; optional mechanical stage with travel range of 127 mm x 76 mm
Onboard display	10.1-inch high-resolution LCD touchscreen display (1,920 x 1,200-pixel resolution)
Camera	High-sensitivity color CMOS camera (2,064 x 1,536-pixel resolution, 3.2 megapixels) with 3.45 μ m pixel resolution
Output ports	1 USB 3.0, 2 USB 2.0
Power supply	Universal power supply (12 V, 5 A) and power cord
Dimensions (L x W x H)	19.1 x 11.7 x 12.7 in. (48.6 x 29.6 x 32.3 cm)
Weight	18.4 lb (8.3 kg)

Ordering information

Description	Cat. No.
EVOS M3000 Imaging System	AMF3000
EVOS Objective Starter Kit for Brightfield/Phase (includes 4X, 10X, and 20X achromat, long working distance, phase contrast objectives)	AMEP5009
EVOS Objective Starter Kit for Fluorescence/Brightfield/Phase (includes 4X, 10X, and 20X fluorite, long working distance, phase contrast objectives)	AMEP5010
EVOS M3000 Mechanical Stage	AMEP5011

Find out more at thermofisher.com/evosm3000

invitrogen