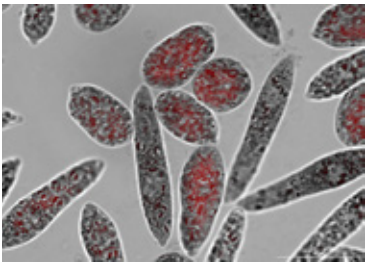
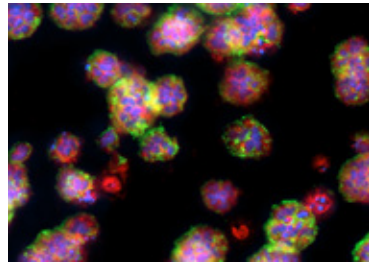


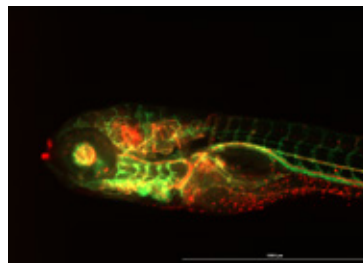
Cytation 3 is a unique modular instrument that can be configured for 2.5x to 60x automated digital fluorescence and brightfield microscopy, or for microscopy and conventional multi-mode microplate reading. With an emphasis on live-cell assays, Cytation 3 features temperature control to 45 °C, CO<sub>2</sub>/O<sub>2</sub> gas control and support for time lapse studies. Automated cell counting, sub-population analysis and other statistical analyses are all available in BioTek's Gen5™ Image+ software. Unlike typical complex imaging software interfaces, Gen5 is specifically designed for use with minimal training. Cytation 3 offers powerful, affordable fluorescence microscopy.



Euglena gracilis, 60x



HCT116 Tumoroids, 20x



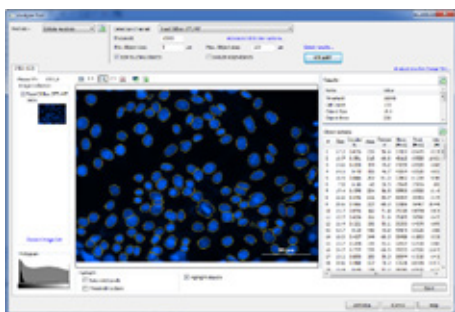
Zebrafish, 4x



Objectives

## Features:

- Inverted fluorescence (4 filter cube capacity) and brightfield microscopy
- From 2.5x for full-well imaging to 60x for sub-micron resolution of intra-cellular details
- Flexible sample format: Accommodates 6- to 384-well plates, microscope slides, Petri dishes and T25 cell culture flasks
- Affordable automation: Automated XY stage, auto focus, auto exposure, automated image capture, auto LED intensity
- Automatic cell counting, sub-population analysis and image statistics with optional Gen5 Image+ software
- End point, time-lapse and montage assays
- Z-Stacking, z-projection, digital phase contrast, image stitching
- LED cubes provide high sensitivity and long lamp life time
- High quality images: Olympus objectives, 16-bit gray scale CCD camera, Semrock filters
- Temperature control to 45 °C
- Linear, orbital and double orbital shaking
- CO<sub>2</sub>/O<sub>2</sub> gas control and monitoring module available
- Dual reagent injector available
- BioStack™ compatible for automating slide and microplate imaging
- Modular and upgradable: Automated fluorescence microscopy only, or microscopy plus conventional fluorescence intensity, fluorescence polarization, time-resolved fluorescence, luminescence and absorbance measurements
- BioSpa™ 8 Automated Incubator compatible for live and fixed cell assay automation



Automated cell counting in Gen5 Software.

## Specifications:

### General

Imaging modes:	Fluorescence and brightfield
Read method:	End point, time-lapse, kinetic, well mode, montage
Labware type:	6- to 384-well plates, microscope slides, Petri dishes, cell culture flasks (T25)
Temperature control:	To 45 °C; ±0.2 °C at 37 °C
Shaking:	Linear, orbital, double orbital
Automation:	BioStack™ and 3rd party automation compatible BioSpa™ 8 Automated Incubator compatible
CO <sub>2</sub> and O <sub>2</sub> control:	0 – 20% CO <sub>2</sub> control and 1 – 19% O <sub>2</sub> control, with optional Gas Controller
Software:	Gen5™ Data Analysis Software; optional Gen5 Image+
Microplate reader detection modes available:	Monochromators: FL, Lum, UV-Vis Abs Filters: FL, TRF, FP, Lum

### Imaging

Camera:	16-bit monochrome, Sony CCD, 1.1 megapixel
Imaging filter cube capacity:	4 onboard, user-replaceable filter cubes
Imaging filter cubes available:	Propidium iodide, Acridine orange, CYP-YFP FRET, DAPI, CFP, GFP, YFP, RFP, Texas Red, CY5 and CY7, Propidium Iodide, Acridine Orange, CYP-YFP FRET, Chlorophyll, Phycoerythrin, CY5.5, TagBFP
Imaging LED cubes available:	365 nm, 390 nm, 465 nm, 505 nm, 523 nm, 590 nm, 623 nm, 655 nm, 740 nm
Objective capacity:	2 onboard, user-replaceable objectives
Objectives available:	2.5x (2.25x eff), 2.5x (2.75x eff), 4x, 10x, 20x, 40x, 60x
Image collection rate:	96 wells, 1 color (DAPI), 4x, 6 minutes 96 wells, 3 colors, 4x, 12 minutes

For complete and current specifications on all configurations available for Cytation 3, visit <http://www.biotek.com/products/imaging/>.

## Configurations:

- CYT3V: Cytation 3 w/fluorescence microscopy module
- CYT3FV: Cytation 3 w/fluorescence microscopy module and filter multi-mode optics
- CYT3MV: Cytation 3 w/fluorescence microscopy module and monochromator multi-mode optics
- CYT3MFV: Cytation 3 w/fluorescence microscopy module, monochromator and filter multi-mode optics

## Optional Accessories:

- CO<sub>2</sub>/O<sub>2</sub> Gas Controller Module
- Dual Reagent Injector Module
- BioStack™ Microplate Stacker
- BioSpa™ 8 Automated Incubator
- Gen5 Image+ Software

## Typical Applications:

Applications in fluorescence microscopy and multi-mode microplate reading.

- Cell imaging and analysis
- Cell proliferation
- Cytotoxicity
- Protein expression
- Biomarker quantification
- Drug discovery
- Genetic analysis
- Drug absorption and metabolism
- Biologics drug discovery and development
- Environmental testing
- Food safety
- Nucleic acid quantification
- Protein quantification



Cytation 5 interfaces with the new BioSpa 8 Automated Incubator for live cell assay workflows.



Filters are easily user replaceable.



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Performance values represent the average observed factory test values.

\*Specifications subject to change.

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