



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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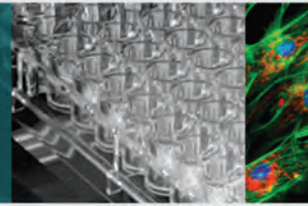
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## Cytation™ 1 Cell Imaging Multi-Mode Reader

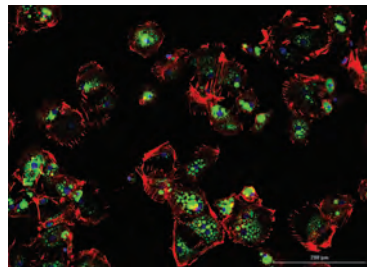


Cytation™ 1 Cell Imaging Multi-Mode Reader eliminates the complexities of multi-mode detection without compromising performance. It can be configured with optional fluorescence and high contrast brightfield cellular imaging up to 60x magnification - this unique, patented design provides both quantitative phenotypic cellular information with well-based quantitative data, in an affordable, compact system.

Cytation 1's multi-mode detection module includes high sensitivity filter-based fluorescence and luminescence, and a monochromator system for UV-Vis absorbance. Temperature control to 45 °C and shaking are standard; CO<sub>2</sub>/O<sub>2</sub> control and reagent injectors are available. BioTek's powerful Gen5™ software automates image capture, plate reading, data and image analysis and reporting.



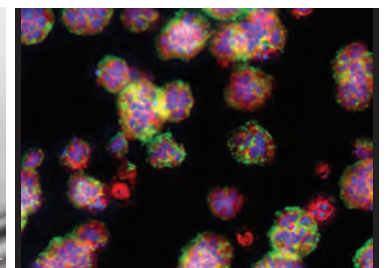
Live cell assays



Primary hepatocytes, 10x



Zebrafish embryo



Z-stack, 20x

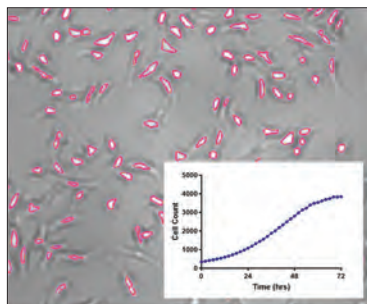


## Features:

- Affordable, patented quantitative digital microscopy with optional multi-mode microplate detection.
- Augmented Microscopy™ using Gen5 software for automated image capture to quantitative publication-ready data.
- Fluorescence and brightfield imaging from 1.25x to 60x, imaging larger samples to intra-cellular details.
- Affordable automation: automated XY stage, focus, exposure, image capture and LED intensity.
- Cell friendly design – 4-Zone incubation to 45 °C with Condensation Control, and CO<sub>2</sub>/O<sub>2</sub> control.
- High performance filter-based fluorescence and luminescence detection with monochromator-based UV-Vis absorbance.
- Available angled injectors for rapid inject/image or read assays

## Typical Applications:

- Cell culture QC
- Cell migration and invasion
- Food/ Beverage Quality and Safety Testing
- Cell Proliferation
- Calcium flux
- ELISA, kinetic ELISA
- Apoptosis
- Translocation
- Nucleic acid quantification
- 3D cell imaging
- Cytotoxicity
- Protein quantification
- Tumor invasion
- Cell viability
- Wound migration
- Signal transduction
- Neurite outgrowth
- Stem cell differentiation
- Phenotypic assays
- Phagocytosis



High contrast brightfield for cell counting

## Configurations:

- CYT1AF:** Cytation 1 w/filter-based fluorescence and luminescence, monochromator-based UV-Vis absorbance. Includes Gen5 software. Fluorescence filter cubes sold separately.
- CYT1V:** Cytation 1 w/Cytation 1 with fluorescence and high contrast brightfield imaging. Includes imaging controller and Gen5 software. Imaging filter/LED cubes and objectives sold separately.
- CYT1AFV:** Cytation 1 w/fluorescence and high contrast brightfield imaging, filter-based fluorescence and luminescence, monochromator-based UV-Vis absorbance. Includes imaging controller and Gen5 Software. Imaging filter/LED cubes, objectives and fluorescence filter cubes sold separately.

## Optional Accessories:

- CO<sub>2</sub>/O<sub>2</sub> Gas Controller
- Gen5™ Image+ and Image Prime for advanced image analysis
- Gen5 Secure for 21 CFR Part 11 compliance
- Dual Reagent Injector Module
- BioStack™ Microplate Stacker
- BioSpa™ 8 Automated Incubator
- Take3™ Micro-Volume Plates



Cytation 1 interfaces with the BioSpa 8 Automated Incubator for live cell assay workflows.

## Specifications:

### General

- Microplates:** 6- to 384-well microplates, 1.0" maximum height
- Other labware supported:** Microscope slides, Petri and cell culture dishes, cell culture flasks (T25), counting chambers (hemocytometer), Take3™ Micro-Volume Plates
- Temperature control:** 4-Zone™ incubation to 45 °C with Condensation Control™
- Shaking:** Linear, orbital, double orbital
- Automation:** BioStack™, BioSpa™ 8, and 3rd party automation 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™ Microplate Reader and Imager Software included

### Imaging

- Imaging modes:** Fluorescence and high contrast brightfield
- Imaging methods:** Single color, multi-color, montage, time lapse, Z-stacking
- Light source:** High power LEDs
- Camera:** 16-bit gray scale, Sony CCD, 1.25 megapixel
- Resolution:** 0.3 μm/pixel at 20x
- Filter cube capacity:** Up to 4 onboard, user-replaceable cubes
- Colors available:** More than 15 colors
- Objective capacity:** 2 onboard, user-replaceable objectives
- Available objectives:** 1.25x, 2.5x (2.25x eff), 2.5x (2.75x eff), 4x, 10x, 20x, 40x, 60x
- Automated functions:** Autofocus, user-trained autofocus, autoexposure, auto-LED intensity
- Autofocus methods:** Image-based autofocus; laser autofocus option
- Image collection rate:** Image-based autofocus: 96 wells, 1 color (DAPI), 4x, 6 minutes  
Laser autofocus: 96 wells, 1 color (DAPI), 4x, <3 minutes  
Burst Mode: 10 fps, single well, single color at ≤ 50ms integration time

### Fluorescence Intensity

- Light source:** Xenon flash lamp
- Detector:** PMT
- Read methods:** End point, kinetic, area scanning, inject/read process
- Wavelength selection:** Deep blocking bandpass filters/dichroic mirrors
- Dynamic range:** 7 decades
- Sensitivity:** Fluorescein: 0.25 pM (0.025 fmol/well, 384-well plate)
- Read speed:** 96 wells: 11 seconds; 384 wells: 22 seconds

### Luminescence

- Sensitivity:** 10 amol ATP (flash); 100 amol (glow)
- Read modes:** End point, kinetic, area scanning, inject/read process

### Fluorescence Polarization

- Sensitivity:** 1.2 mP standard deviation at 1nM fluorescein
- Wavelength range:** 400 – 700 nm
- Read modes:** End point, kinetic, inject/read process

### Time-Resolved Fluorescence

- Sensitivity:** Europium 40 fM (4 amol/well, 384-well plate)

### Absorbance

- Light source:** Xenon flash lamp
- Wavelength selection:** Monochromator
- Wavelength range:** 200 – 999 nm, 1 nm increment
- Bandwidth:** 2.4 nm
- Dynamic range:** 0 – 4.0 OD
- Resolution:** 0.0001 OD

### Reagent Injectors

- Number:** 2 syringe pumps
- Dispense volume:** 5 – 1,000 μL in 1 μL increment
- Dead volume:** <1.1 mL with back flush

### Physical Characteristics

- Power:** 100-240 VAC, 50/60 Hz (24VDC external power supply, 160W min)
- Dimensions:** 20" D x 16.5" W x 17.5" H (50.8 cm x 41.91 cm x 44.5 cm)
- Weight:** 65 lbs (29 kg)

### Regulatory

- Power:** CE and TUV marked. Models for In Vitro Diagnostic use are available.

*Performance values represent the average observed factory test values.*

*Specifications subject to change.*



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