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Quality Control



Hillary,
Assay Development



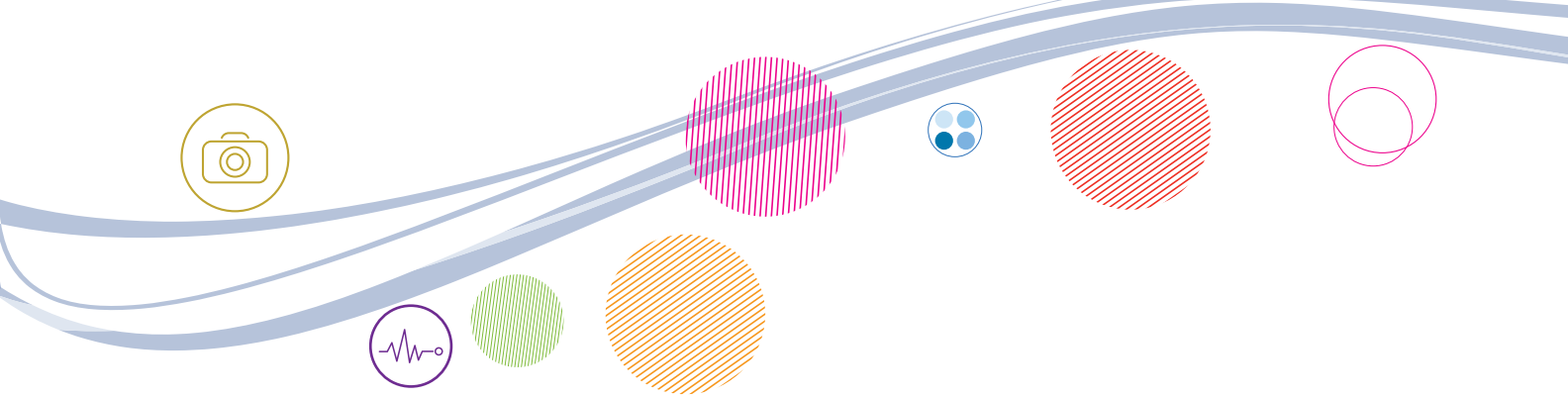
John,
Research Intern



Scarlet,
Safety Testing

Cytell™ Cell Imaging System



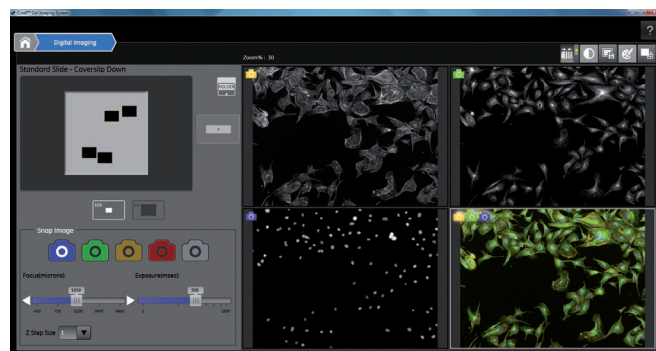


Cytell Cell Imaging System combines the functions of a digital microscope, an image cytometer, and a cell counter in a single benchtop instrument.



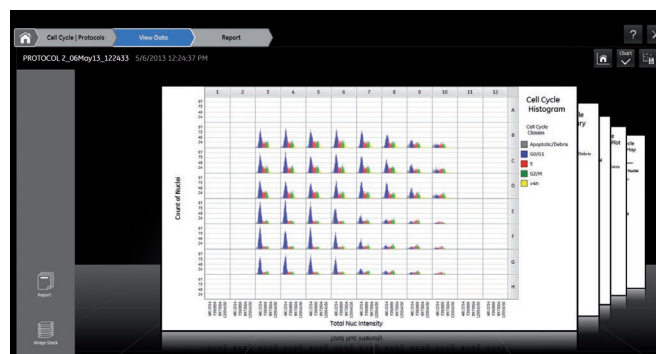
It provides the opportunity for your lab to capture cellular and subcellular image data and analysis results with ease, affording you more time to focus on your research.

This compact, application-driven, automated cell imaging system provides robust quantitative results through the use of preconfigured biological applications (BioApps).



BioApps are easy to use for non-imaging experts to run routine cellular assays, while providing the flexibility and power to meet the needs of the experienced research scientist.

Cytell Cell Imaging System reliably delivers high quality data together with a complete experimental report, which leaves you time to focus on the science!



Simple - no imaging experience required

The BioApps of the Cytell Cell Imaging System simplify routine cell lab tasks while providing high quality scientific data.

Each BioApp is a preconfigured, easy-to-use, automated module that covers all steps of a specific biological application or assay, from imaging through to analysis, data visualization and report generation.

BioApps can be customized for use with a variety of sample containers including slides, flasks, Petri dishes and multiwell plates (6 to 384 wells).

Cytell Cell Imaging System comes bundled with five BioApps to simplify and automate the most routine cellular assays and tasks. The Automated Imaging BioApp also gives you the flexibility to configure your own unique protocols to meet your needs.



Digital Imaging BioApp: Acquire fluorescence and transmitted light images of a sample in plates, flasks, Petri dishes, and slides, with all the freedom afforded by a manual microscope.



Automated Imaging BioApp: Whatever your biology, from neurons to nematodes, this BioApp enables automatic acquisition from an entire multi-well plate in minutes. High quality fluorescence and transmitted light images are saved in standard TIFF and JPEG formats for compatibility with independent image analysis software packages.



Quick Count BioApp: Obtain accurate cell count, viability and concentration estimations based on fluorescence intensity using a disposable hemocytometer.



Cell Cycle BioApp: Analyze cell cycle phase distribution using a single DNA-binding fluorophore as a marker for DNA content in multiwell format.



Cell Viability BioApp: Run two- or three-color assays in multiwell formats with subpopulation gating to determine the percentages of live, dead and unhealthy cells.

We are continually developing new BioApps that will be released as they become available.

Flexible - at your bench, on demand

BioApps harness the flexibility and synergy of combining multiple imaging modalities in a single, multifunctional, automated cell imaging system.

Cell Imager

Cytell offers imaging with up to four fluorescence channels and a bright field mode. Cytell can image cells in multiwell plates, microscope slides, Petri dishes, and flasks. Two objectives have been carefully selected together with a high quality CCD camera to enable imaging of different types of biology. Cytell delivers sharp cellular and subcellular imaging with submicron resolution and a large field of view to make it easy to find features of interest.

Flexibility of sample formats, combined with automated imaging capabilities, and an easy-to-use graphical user interface (GUI), makes Cytell a versatile and precise cell imaging tool for a variety of biological applications.

Cell counter

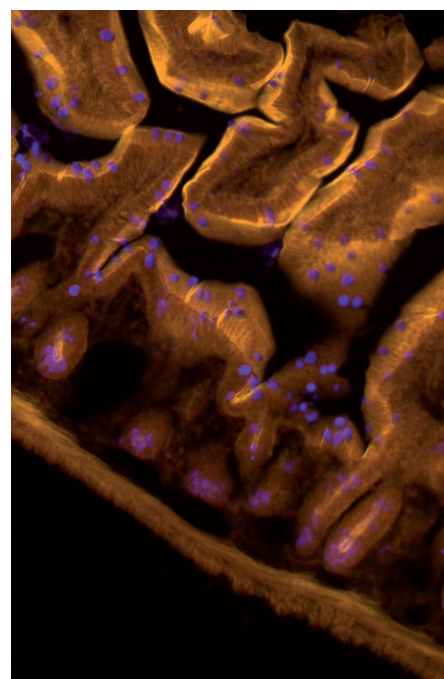
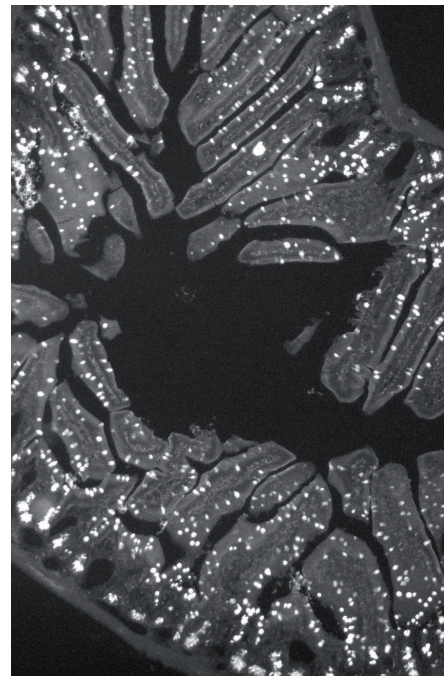
Cytell automatically counts cells in a convenient, disposable, hemocytometer slide. The system provides a quick cell viability assessment and a handy tool for calculation of cell volume and cell density.

Cytell automation makes this routine laboratory task easy and fast. Using image-based cell counting provides higher accuracy and reproducibility than laborious manual counting.

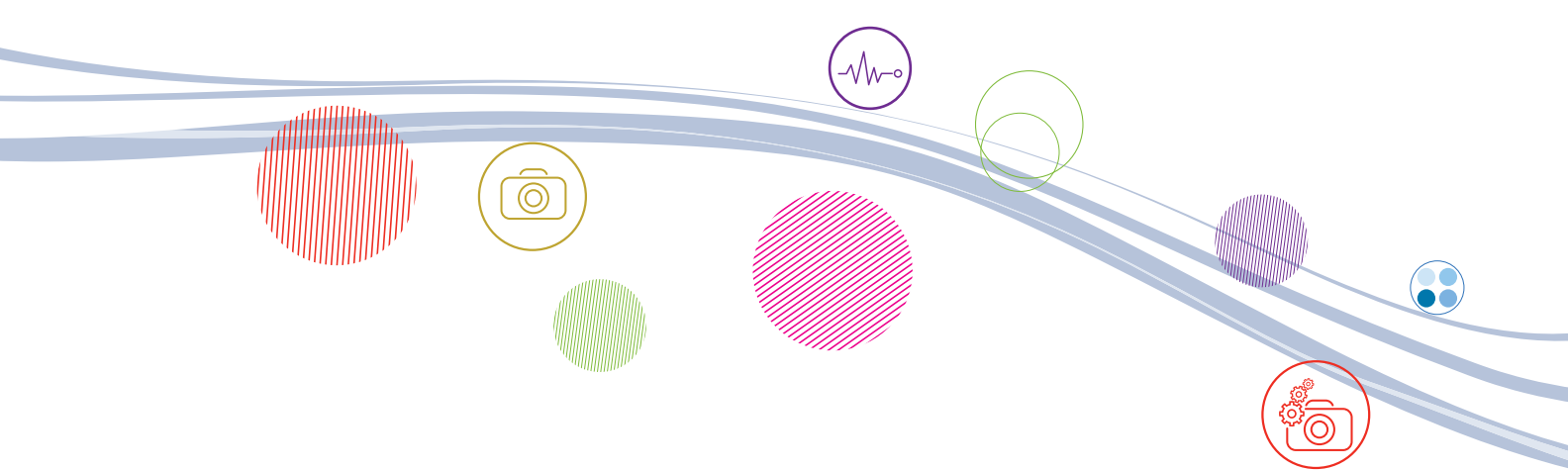
Cytometer

Cytell provides advanced cell quantitation tools for measuring fluorescence and cell morphology. Individual cells can be measured and used for subpopulation analysis. Data visualization tools such as histograms, scatter plots, and plate heat maps allow review of cell population data from many different perspectives.

Compatible GE Healthcare Life Sciences reagents and kits are available for the Quick Count, Cell Cycle and Cell Viability BioApps. In addition, the system provides flexibility to create your own customized protocols based on preferred reagents.



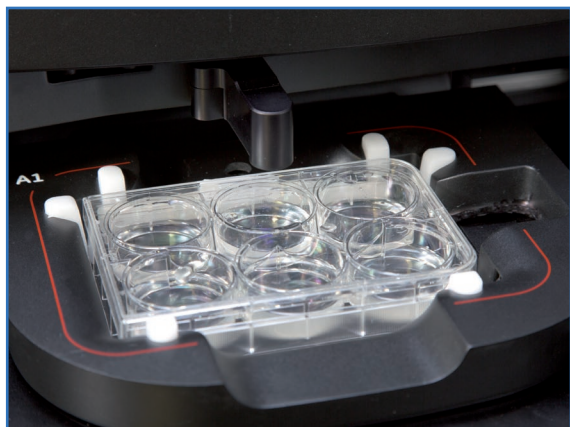
Mouse intestine section with ALEXA FLUOR™ 350 WGA, ALEXA FLUOR 568 Phalloidin, SYTOX™ Green. Large field of view image in Blue channel. High resolution multi-color image in Blue and Orange Channel



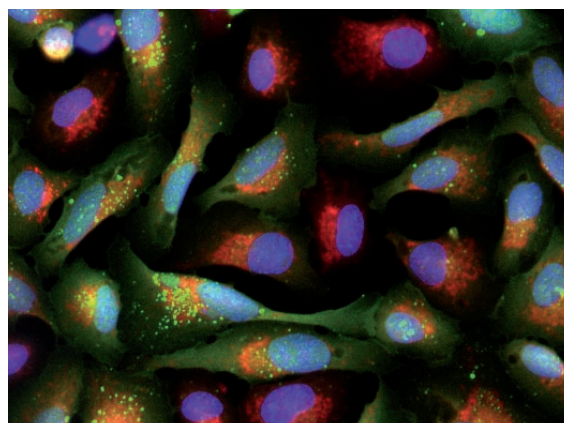
Powerful – cellular and subcellular imaging and analysis

Cytell Cell Imaging System allows the novice, as well as experienced microscopists, to look deeper into their samples. The elegant and compact design of Cytell encloses a powerful imaging capability rarely found in such an affordable, easy-to-use platform.

- See the detail you need with submicron resolution
- Benefit from high sensitivity with 14-bit dynamic range
- Capture cell populations, colonies and small organisms with large field of view
- Multiplex assays and image capture (four fluorescence and bright field channels)
- Support future research needs with adaptable, open platform
- Save images in standard TIFF and JPEG image formats
- Export cellular data for further analysis in your favorite statistical, image, or cytometry analysis software



Versatile: Cytell supports plates (6-384 well), slides, Petri dishes (35, 60, 100 mm), and flasks (T-25 & 75)



Osteosarcoma cell line (U2-OS) stably transfected with an EGFP-FYVE domain reporter, and counterstained to identify nuclei (Hoechst™) and mitochondria (TMRM)

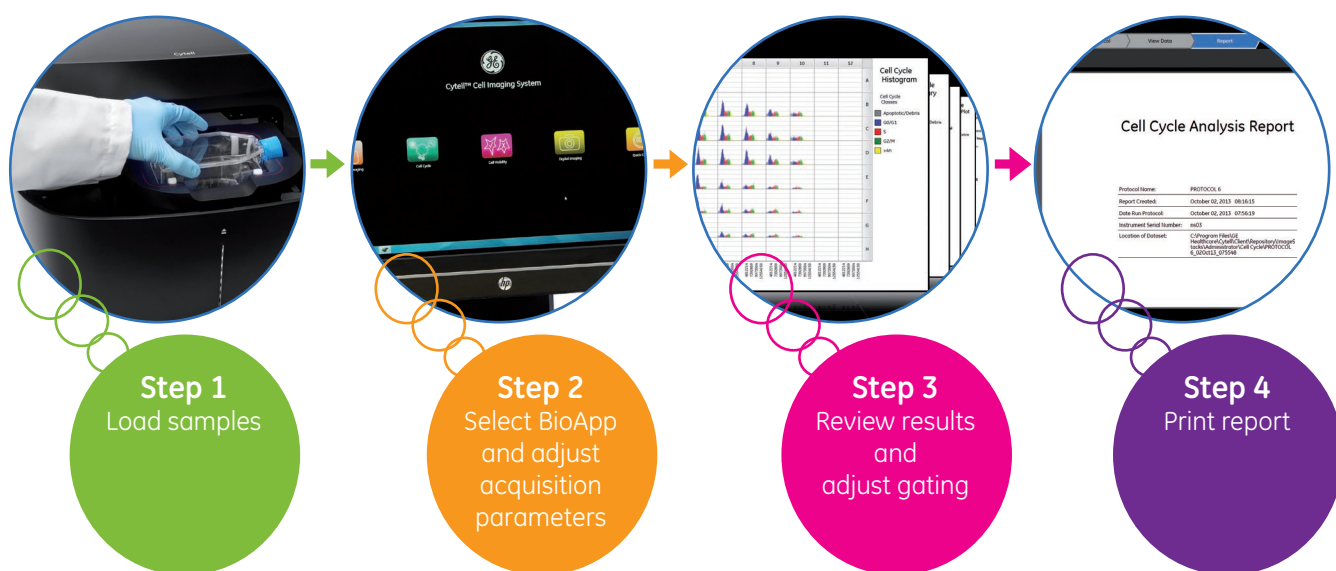
Sample to result in one go

From start to finish, one instrument

The Cytell Cell Imaging System is designed to take you from sample to result in one go, simplifying your work and allowing for increased productivity and efficiency across your organization.

Cytell Cell Imaging System is designed by biologists for biologists. This truly affordable, multipurpose, instrument has everything to become an integral part of a modern cell biology lab. It simplifies routine lab procedures, generates high quality scientific data, and it can be used by everyone in the lab. Cytell can image, count, and quantitate cells, and it does it reliably and with elegance.

Four-step process:



Quantitative imaging and analysis technologies from GE Healthcare Life Sciences

From high-content imagers with extensive data analysis, to super-resolution cellular imaging, GE Healthcare's cutting-edge quantitative imaging technologies give you amazing depth and breadth of investigation, allowing you to analyze interactions as they happen and gain deeper insights into complex cellular mechanisms.

Ordering information

System	Product code
GE Cytell Cell Imaging System comprising instrument, workstation, microscope slide holder, 35 mm Petri dish holder, 60 mm Petri dish holder, 100 mm Petri dish holder, T-25 flask holder, T-75 flask holder, reference slide	29-0567-49

Accessories	Code number
Cytell Microscope Slide Holder	29-0626-75
Cytell 35 mm Petri Dish Holder	29-0626-76
Cytell 60 mm Petri Dish Holder	29-0626-77
Cytell 100 mm Petri Dish Holder	29-0626-78
Cytell T-25 Flask Holder	29-0626-79
Cytell T-75 Flask Holder	29-0626-80
Cytell Quick Count slides	29-0626-81

Related reagents	Code number
Cytell Quick Count/Viability Reagent	29-0574-95
Cytell Cell Viability Kit	29-0574-96
Cytell Cell Viability Plus Reagent	29-0574-97
Cytell Cell Cycle Kit	29-0574-98



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