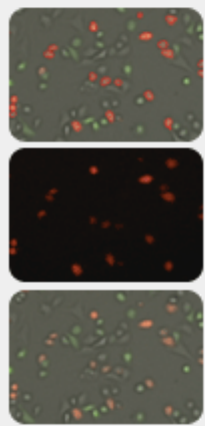


## Celigo Image Cytometer for Live, GFP/RFP Efficiency Assays

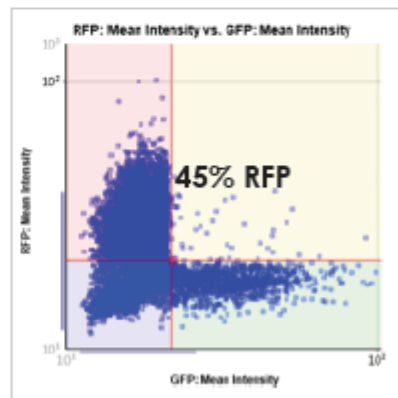
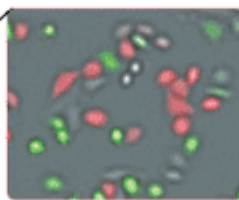
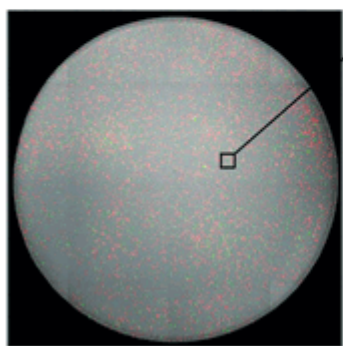
**Celigo Imaging Cytometer** is a benchtop *in situ* cellular analysis system that rapidly provides high integrity whole well images for routine bright field and fluorescent cellular analysis. Acquire publication quality images from flasks or any size plate using adherent or suspension cell lines.

### Measure the GFP/RFP Transfection Efficiencies of Adherent Cells in a Plate!



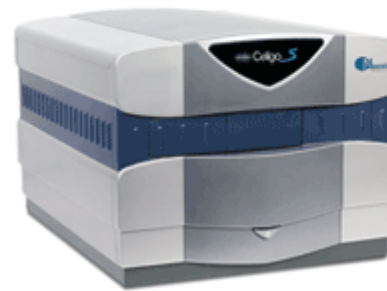
- Identify cells in bright field image
- Measure fluorescent protein signals in green and red channels
- Label-free, non-invasive "no need to trypsinize adherence cells"
- Quantify fluorescent protein signals on a cell-by-cell basis repeatedly on the same plate providing temporal data.
- Add propidium iodide for viability of GFP transfect cells in the same well

### Whole Well View GFP/RFP Transfected HeLa Cells in a 96-Well Plate



An area from a whole-well image is magnified to show an overlay of bright field and GFP/RFP signals. An example of GFP vs RFP intensities are shown in the scatter plot the right.

### Celigo S Imaging Cytometer



**LANÇAMENTO**

- Whole and partial well imaging
- LED-based bright-field imaging
- LED-based fluorescence at three wavelengths
- Auto-focus

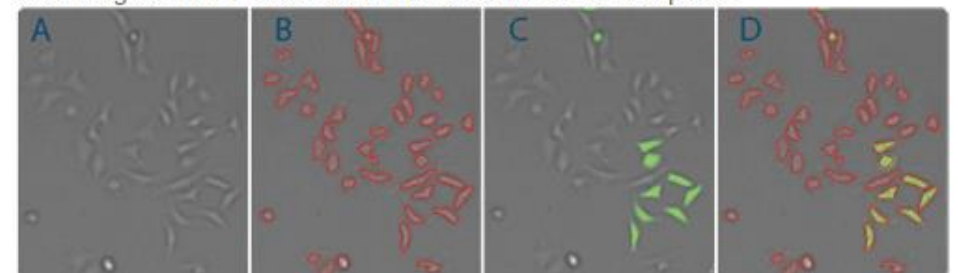
Plate	Images/ well	Resolution (µm/pxl)	Speed Improvement	Typical Time
1536-well plate	1	2	1.8x	less than 6 min
384-well plate	1	2	3x	less than 2 min
384-well plate	4	2	3.5x	less than 5 min
96-well plate	16	2	2.4x	less than 3.5 min
96-well plate	16	1	1.6x	less than 10 min

Bright Field	Fluorescence
<ul style="list-style-type: none"> <li>Cell Survival</li> <li>Cytotoxicity</li> <li>Proliferation</li> <li>Growth Curve</li> <li>Dose Response</li> <li>Growth Inhibition</li> <li>Cell Line Expansion</li> <li>3D Growth Inhibition</li> <li>Tumor Spheroid Formation</li> </ul>	<ul style="list-style-type: none"> <li>Viability</li> <li>Infectivity</li> <li>Migration</li> <li>Cell Death: PI</li> <li>Invasion Assays</li> <li>Protein Expression: GFP, RFP, mCherry</li> </ul>
	<ul style="list-style-type: none"> <li>ROS</li> <li>Viability</li> <li>Cell Cycle: PI</li> <li>Immunostaining</li> <li>Proliferation: Edu</li> <li>Apoptosis: Annexin-V</li> <li>Stem Cell Surface Marker</li> <li>iPSC Colony Reprogramming</li> </ul>

**Celigo S**

### GFP Transfection Optimization in 96-Well Plate Without Trypinization

Cell Images of GFP transfected HeLa cells in a 96-well plate.



(A) Bright field cell image including transfected and non-transfected cells. (B) Celigo image process software identifies all the cells using bright field image, indicated by the red outline. (C) GFP positive cells are identified (D) Within this red outline, green fluorescence intensity was measured to gate cell populations and produce transfection efficiency based on the total number of cells counted in bright field.