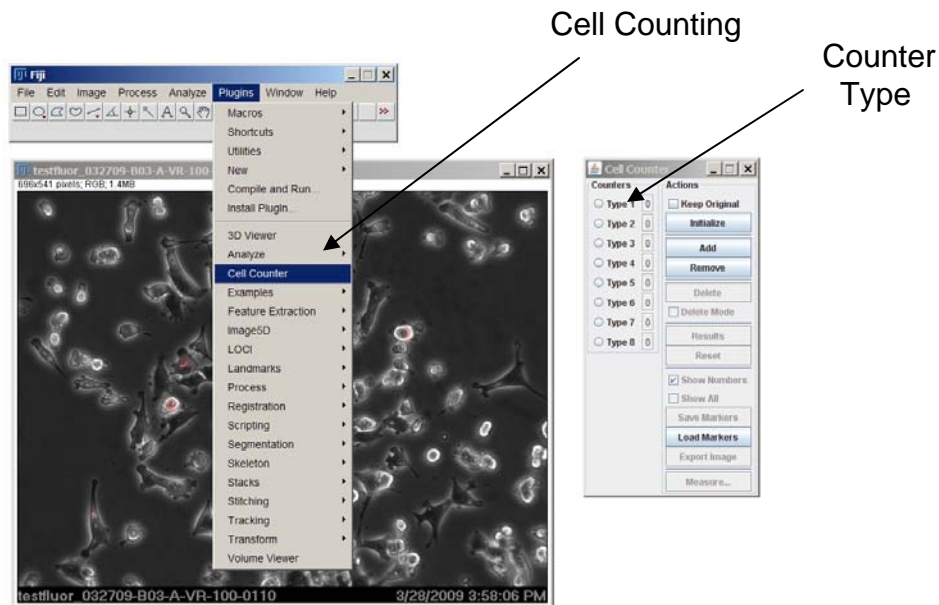


Cell Counting – (Manual counting in Fiji)

[Fiji](http://pacific.mpi-cbg.de/wiki/index.php/Main_Page) is an image processing package based on [ImageJ](http://imagej.nih.gov/ij/)
http://pacific.mpi-cbg.de/wiki/index.php/Main_Page

Cell Counting is a quick way to analyze a series of images, looking for cell growth or death. Download the Plugin cell_counter.jar to the Plugins folder, the added feature is available the next time you start Fiji. After starting Cell Counter, and selecting a sequence of images, you can start to count your cells. Select a counter type (a color) and just click on the cells. The program counts the clicks and annotates the image. You have the option of counting any number of different types of cells. You can add or subtract, to improve your accuracy. You can do this for each image or only one. It's possible to get growth curves or just a final end point. Another possibility is to count divisions.



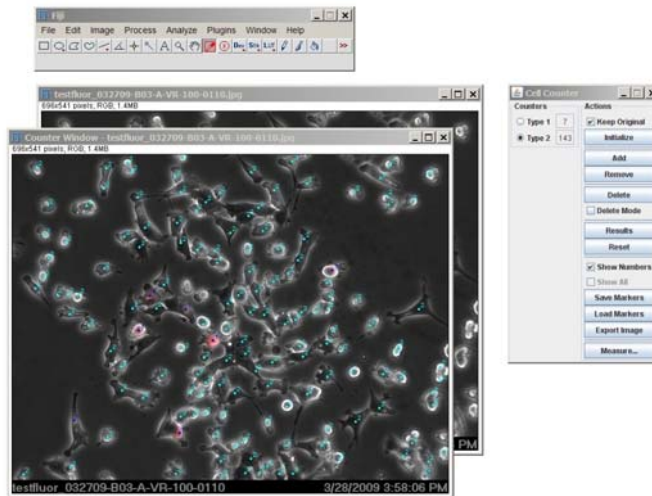
1. First load a sequence File> Import> Image Sequence
2. Select Cell Counting from the Plugin pull down
3. Select Keep Original if you want an original copy, then select Initialize
4. Select a Counters Type, Type 1 for example
5. Select Show Numbers and Show All
6. Start to click on the cells you want to count.
7. If you have many different types of cells, use different Counter Types.

For more information, please contact:

Kairos Instruments, LLC.
520 William Pitt Way
Pittsburgh, PA 15238

Telephone: 412-519-9613
Website: <http://www.kairosinstruments.com>
Email: Info@kairosinstruments.com

Here is an example of a set of counted cells. The fluorescent cells, (red), were counted with type 1. They are dark blue in the image. The rest of the cells were counted with Type 2. So, there are 10 fluorescent cells and 143 nonfluorescent cells.

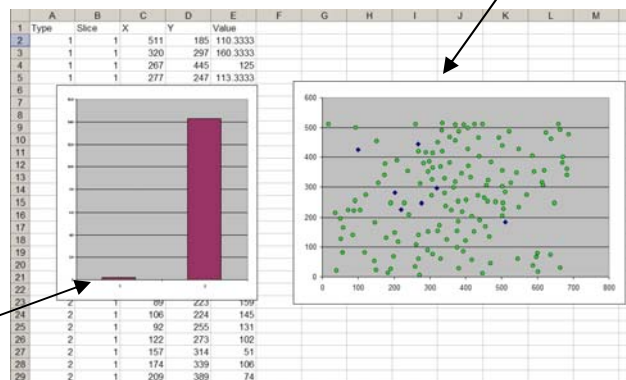


Select Measure ... This function opens the Results form, giving you the X, Y and pixel intensity for each counted cell. In the Results field, save the data. The Results are saved in an Excel file, .xls format. So you can open the data in Excel and do further analysis.

Type	Slice	X	Y	Value
1	1	511	185	110.33333587646484
1	1	320	297	160.3333282470703
1	1	267	445	125.0
1	1	277	247	113.33333587646484
1	1	220	226	108.33333587646484
1	1	202	281	88.66666412353516
1	1	99	425	146.0
2	1	39	20	134.0
2	1	184	13	164.0
2	1	191	27	165.0
2	1	146	54	122.0
2	1	150	22	73.0
2	1	119	82	71.0
2	1	57	81	85.0
2	1	52	128	170.0
2	1	86	140	181.0
2	1	58	165	101.0

Export to Excel

X, Y Plot



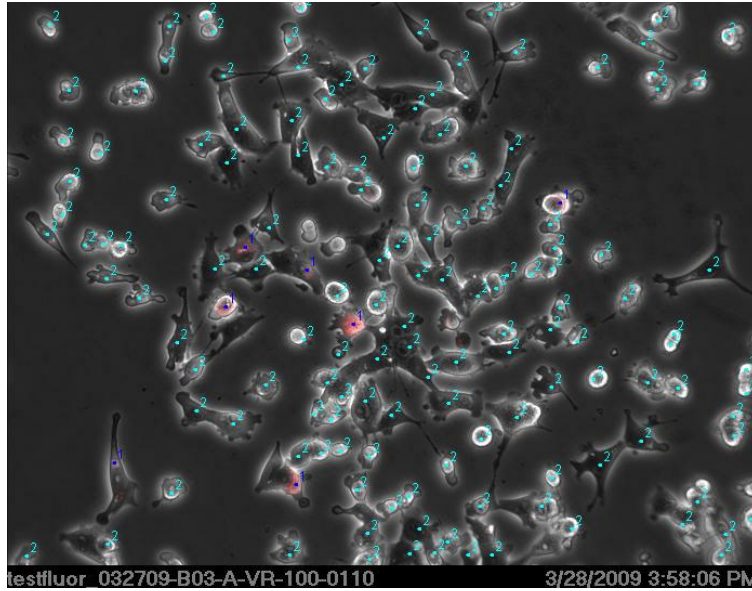
Cell count bar chart

For more information, please contact:

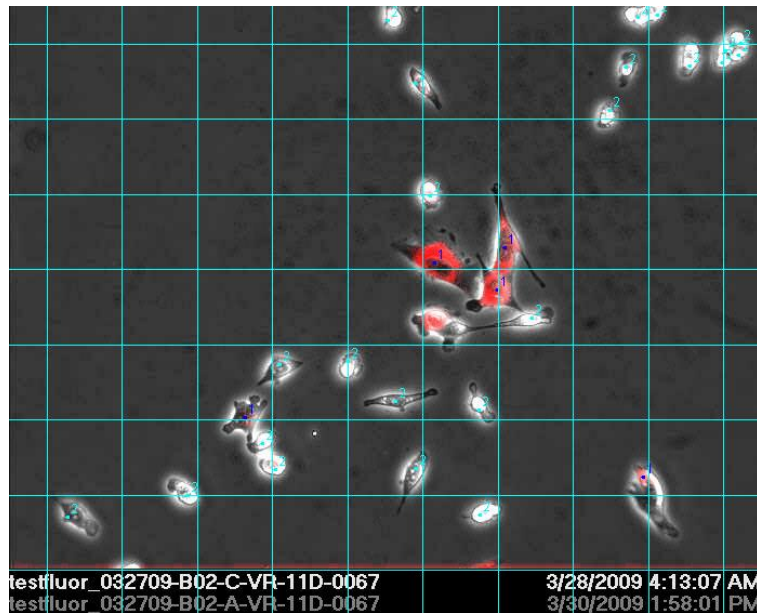
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You can export the image for later review and export the Markers with the Save Marker Button.



If you have a lot of cells to count, you can first set up a grid. If the cells are evenly spaced, you could count a grid and estimate the full population



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