

## SOP-E030

### Counting Cells using the Nexcelom Counter

**Objective:** To find the cell concentration

**Products:** Nexcelom Cellometer Cell Counting Chambers Slides (Nexcelom Bioscience cat# SD100)  
Single Cell Suspension of culture cells  
Counter password: Auto T4

**Procedure:**

1. Remove the film from both sides of the cell counting chamber slide. Using your pipette, place approximately 50mls of cells on the film. From that amount, pipette 22ul of cells into the well on the slide. **DO NOT BLOW OUT THE PIPETTE. THIS WILL CAUSE BUBBLES.** Bubbles can give you an incorrect concentration.
2. Turn on the power to the Nexcelom Cellometer Auto T4 by flipping the switch on the back of the unit.
3. To launch the Nexcelom analysis program located on the Desktop, double click on the icon saying "Cellometer Auto T4".
4. Put the slide in the Nexcelom Cellometer Auto T4.
5. In the program, select the cell type in the program by clicking on the drop-down list. Click on the Display Image.
6. Using the camera interface on the computer screen, focus the cells using the dial to the right of the ocular lens until a hard edge is observed on the cells. Click Count.
7. Click Set Sample ID and type in the sample name. Sample names are in the following format: <cell type-passage number-type of count growth conditions>. Click Save.
8. Save the image: Go to File/Save Image. There is a folder on the Desktop that is instrument/project specific. Find the folder and click Save.
9. Export the results into Excel. Go to File/Excel Export and save the spreadsheet in the appropriate folder by clicking Save. (Often times growth conditions and sample use information are included under the cell concentration.)
10. Turn off the power to the Nexcelom Auto T4 and remove the slide. Dispose of the slide appropriately.

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**Created by:** Cheryl Holdman

**Verified by:** \_\_\_\_\_ **Date:** 4/1/2013

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