

Counting Cells in a hemocytometer

Protocol

Hemocytometers can be purchased from many major laboratory suppliers. The procedure below gives general directions on how to use the hemocytometer.

- 1. Clean the cover slip and chamber with alcohol. Dry and put the coverslip into position.
- 2. Harvest the cells. Add 10 µL of the cells to the hemocytometer. It is important to not overfill.
- 3. Put the chamber in the inverted microscope under a 10X objective. Use phase-contrast to differentiate the cells.
- 4. Count the cells in the large, central gridded square (1 mm²). See the circled area in the graphic below. Multiply by 10⁴ to estimate the number of cells per mL. Prepare duplicate samples and average the count.

