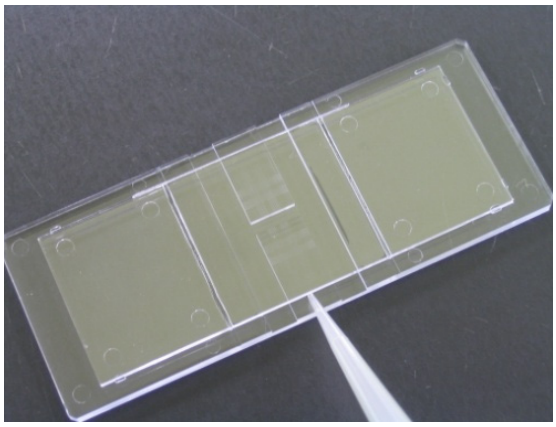
Cell Counting Chamber



Instructions for Use

1. Inject approximately 10 µL of the cell suspension into the space between the cover and the base (shown at top right). If necessary, tap the base slightly to help the suspension flow into the counting area.

2. Count the number of cells in a 1 mm × 1 mm grid with a microscope (for greater accuracy, count two or more areas).

3. Calculate the cell concentration.

   The grid design and size of the counting chamber is shown in the figure to the right. The depth of the space is 0.1 mm. The volume of one cell counting region is:

   $$1 \text{ mm} \times 1 \text{ mm} \times 0.1 \text{ mm} = 0.1 \text{ mm}^3 = 0.1 \text{ µL}$$

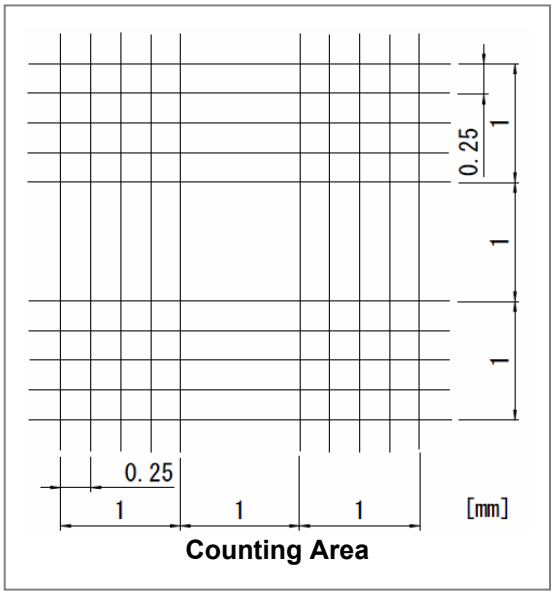
   Therefore, the number of cells within the 1 mm × 1 mm lattice is the number of cells included in a suspension of 0.1 µL.

   Example: When the total number of cells in four areas of the 1 mm × 1 mm grid is 400, then

   $$400 \text{ cells}/0.4 \text{ µL} \div 4^* = 100 \text{ cells}/0.1 \text{ µL} = 1 \times 10^6 \text{ cells/mL}.$$

   (* = total number of areas counted)

4. Discard the used cell counting plate according to the predetermined protocol in each laboratory.



Counting Area

Additional Information

1. Do not pour the cell suspension too quickly or use more than the suggested amount. The cell suspension could flow beyond the desired counting area and into the opposite area.
2. Do not reuse.
3. Do not retain a plate that has one used part and one unused counting area for later use.
4. For research use only.

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