

Cell-Chip

Innovation by



The Cell-Chip counting chamber looks like the familiar Neubauer „improved“ hemocytometer. However, the chambers are covered to provide more safety and consistent volume. Count your cells as usual - With the Cell-Chip, you inject the sample, stained or unstained, into the desired chamber. Two separate counting chambers enable two counts per Cell-Chip.

Cell-Chip is highly recommended for hazardous material (HIV/AIDS, Ebola, H5N1 etc.) due to its safe-enclosure design.

Quick, easy and safe:

- Minimal counting tolerances
- GMP compliant
- Clean-Room manufacturing
- Bio-Safe: minimized infection risk
- Easy to recycle
- Sterile, single wrapped

Features

IVD IVD Certified

Cell-Chip is compatible with automatic counters which helps you achieve fast, easy and consistent results.

2x 2 Chambers

With its two chambers, every Cell-Chip can be used twice and therefore doubles its worth.

Product Data

Specification Cell-Chip with counting grid Neubauer „improved“ 50 pcs., individually packaged

Product No.	505050
Dimensions	25 x 75 x 1.6 mm
Volume	2 x 10 µl
Chamber depth	0.1 mm

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Bioswisstec Lime Green Line

High quality tissue culture flasks with 0.2µm sterile filter cap

Product No. 900025 / 25 cm²

Product No. 900075 / 75 cm²

Product No. 900175 / 175 cm²



Fetal Bovine / Calf Serum

High quality serum to give your cells a head start

Product No. S 40500

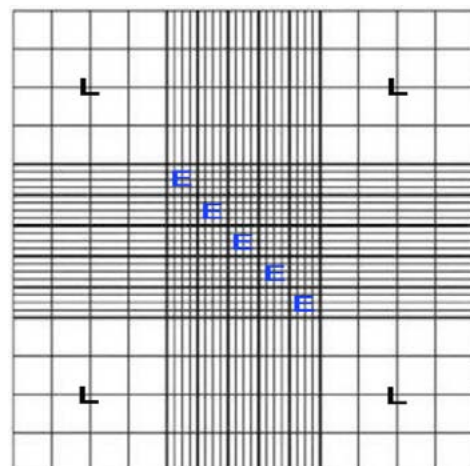
Unit Size 500 ml

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Details & Instructions

Structure of the „improved“ counting chamber

The counting chamber consists of 9 large squares (3x3), of which 4 are corner squares (L). The corner squares (L) are divided into 16 squares (4x4). The central square is divided into 5x5 squares (E) that are divided into 4x4.



Volume details for the L-squares

The area of the L-squares results from the edge lengths:
 $1 \text{ mm} \times 1 \text{ mm} = 1 \text{ mm}^2$.

At a chamber depth of 0.1 mm this results in a volume of 0.1 mm^3 in the L-squares (conversion: 0.1 mm^3 correspond to $0.1 \mu\text{l}$ or 10^{-4} ml .)

Counting with the Cell-Chip

Leukocyte counting (1:20 dilution)	Amount of Leukocytes
<ol style="list-style-type: none"> 1. Dilute blood using accepted laboratory methods 2. Load $10 \mu\text{l}$ of diluted sample into the sample injection area 3. Count the erythrocytes in the 5 small squares (four small corner squares and one small middle square) of the large center square 	<p>leukocytes per ml =</p> <p>cells in 4 corner squares / 4 x 20 (dilution factor) x 10^4 (volume factor)</p>
Mammalian Cell counting	Amount of Mammalian Cells
<ol style="list-style-type: none"> 1. Treat the cell samples with Trypsin-EDTA. 2. Carefully remove the supernatant with a pipette tip without disturbing the pellet 3. Add an appropriate volume of growth media or PBS to dilute to a final concentration of 5×10^3 cells/ml to 5×10^6 cells per ml 4. Thoroughly resuspend the cell pellet with a pipette 5. Check visually if there are any cell clumps or agglomerates 6. Load $10 \mu\text{l}$ of sample into the sample injection area 7. Count the cells in 5 large squares 	<p>mammalian cells per ml =</p> <p>cells in 5 large squares / 5 x dilution factor x 10^4 (volume factor)</p>
Erythrocyte counting (1:200 dilution)	Amount of Erythrocytes
<ol style="list-style-type: none"> 1. Dilute blood using accepted laboratory methods 2. Load $10 \mu\text{l}$ of diluted sample into the sample injection area 3. Count the erythrocytes in the 5 small squares (four small corner squares and one small middle square) of the large center square 	<p>erythrocytes per ml =</p> <p>cells in 5 small squares x 5 x 200 (dilution factor) x 10^4 (volume factor)</p>



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