



Eliminate Human Bias in Cell Counting

The volume-calibrated single-use Via1-Cassette™ is a true all-in-one solution for optimized cell counting. Their disposable plastic unit contains the fluorescent dyes used for analysis. You can load a cell sample into the cassettes by simply submerging the built-in pipette into the cell suspension and pressing the piston down.

Precision, Accuracy and Reproducibility

The Via1-Cassette™ is loaded with immobilized acridine orange (AO) and DAPI for labeling of total cell and dead cell populations, respectively. The analysis of AO and DAPI fluorescence data is performed by the instrument software and will be the same in every analysis. No human bias will influence cell definition and analysis results. For further precision and reproducibility of results, the cassette's measurement chamber has a pre-calibrated volume, detected individually for each sample analysis run. No user or pipetting errors interfere with data generation, and the instrument will tell you if you have too few or too many cells in the sample.

A Safe, Non-Toxic Cell Counting System

Many cell counting methods, whether automated or manual, use trypan blue to stain and identify dead cells. Trypan blue is toxic, and potentially exposes the cell counting operator while pipetting and handling the stain and cell sample. The Via1-Cassette™ is preloaded with acridin orange (AO) and DAPI to stain all cells and dead cells, respectively. Furthermore, the Via1-Cassette™ is a custom-made disposable plastic device designed for optimal sample handling and safe disposal. The sample and stains are contained within the Via-Cassette and will not be released during use. It can be safely disposed of after use, providing a safe working environment for the user.

Please see the [Via-Cassette Conformity Statement](#) for further details.

	Via1-Cassette™
Use with	NucleoCounter® NC-200™
Dyes	AO and DAPI
Sample Volume Loaded	60 µl
Analysis Volume	1.4 µl
Volume-Calibrated Cassette?	Yes





See How the Via1-Cassette™ Works

Calibration Measuring Chamber

NucleoCounter® - NC-200™ analyzes a total volume of 1.4 μL sample stained with the fluorescent dyes acridine orange and DAPI. The large volume increases precision compared to manual counting where the standard is to count 100 cells, regardless of the concentration of cells and number of squares counted, or to count 0.4 μL of volume regardless of the number of cells counted.

Calibration Dot-Code

The Via1-Cassette™ is individually volume-calibrated and coded for control of the exact measuring chamber volume. In a standard hemocytometer the spacing can vary up to 10-50%, leading to inaccurate cell concentration calculations.



Integrated Pipette

The Via1-Cassette™ functions as single use pipettes with preloaded dyes, simplifying how you obtain your cell sample, mix cells with dyes and load your sample onto the cell counter, all to eliminate operator bias. Pressing the piston creates a vacuum pulling the cell sample into the cell staining channels without the usual pipetting errors, thereby increasing precision.

Mixing Channels

The Via1-Cassette™ mixing channels are preloaded with acridine orange for total cell stain and DAPI for non-viable cell stain. The intricate shape of the mixing channels ensures even mixing of cells and dyes and delivery of a homogeneous sample into the measuring chamber.