Technology that counts

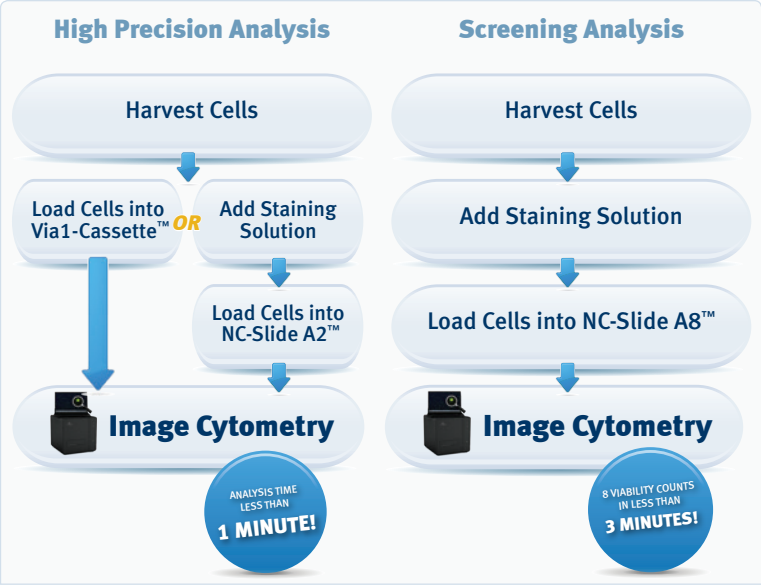
chemometec

NC-3000™ Viability and Cell Count Assay

– For easy, fast and objective cell counting

The Via1-Cassette™ used together with the NucleoCounter® NC-3000™ enables fast and reliable determination of cell count and viability in one simple step. It is suitable for a wide range of cell types such as adherent and suspension cell lines and primary cells. In order to determine viability and cell concentration, a sample of the cell suspension is drawn directly into the Via1-Cassette™. The inside of the Via1-Cassette™ is coated with two different dyes, staining the entire cell population and the non-viable cells, respectively. The Via1-Cassette™ is placed in the NucleoCounter® NC-3000™ where the cell count and viability are determined.

NC-Slides A2™ are recommended for improved statistics, and NC-Slides A8™ are recommended for high throughput analysis.



Key Benefits

of the NC-3000™ Viability and Cell Count Assay

Perform 8 viability counts in less than 3 minutes!

- ✓ Extremely fast and convenient measurement of cell count and viability
- ✓ High accuracy and high reproducibility
- ✓ Automatic data collection
- ✓ Objective analysis
- ✓ No calibration required
- ✓ Specialized protocols for Purified Leucocytes and Full Blood Samples.
- ✓ PlotManager for superior data presentation
- ✓ Automated PDF reports
- ✓ Export of data in FCS/ACS formats

The NucleoCounter® NC-3000™

- Next generation cell analysis

FIXED ASSAYS | HIGH SPEED CELL COUNT | FAST ANALYSIS | VISUAL INSPECTION | NO RINSING | NO CLOGGING | NO CALIBRATION | NO MAINTENANCE | LEARN MORE

Viability and Cell Count | Cell Cycle Assays | Caspase 3/7, 8 & 9 | Annexin V | Mitochondrial Potential | Cell Vitality | DNA Fragmentation | GFP Transfection Efficiency | FlexiCyte™ (user adaptable protocols)

Principle: NC-3000™ Viability and Cell Count Assay

Using fluorescence microscopy and image analysis, the NucleoCounter® NC-3000™ automates the detection of cells. The NC-3000™ Viability and Cell Count Assays use the cell stain Acridine Orange for cell detection, and the nucleic acid stain DAPI for detecting non-viable cells. DAPI cannot penetrate the cell membrane, hence it only stains cells with a permeable cell membrane; the non-viable cells.

The different Viability and Cell Count Assays are optimized for viability and cell counting of mammalian and insect cells, E.g. Purified leucocytes, cells in peripheral blood samples.

For high precision use the Via1-Cassette™ or the NC-Slide A2™ and for screening use the NC-Slide A8™.

The NucleoCounter® NC-3000™
- Next generation cell analysis

NC-Slide A8™ (8 chambers)
- For Screening and High Througput

NC-Slide A2™ (2 chambers)
- For Improved Statistics

Multiple samples – one NC-Slide™
Analyzed volume : 2 - 11 µl

NC-Slide A2™: For improved statistics (CV 4-5 %)
NC-Slide A8™: For screening and high throughput (CV 6-10 %)

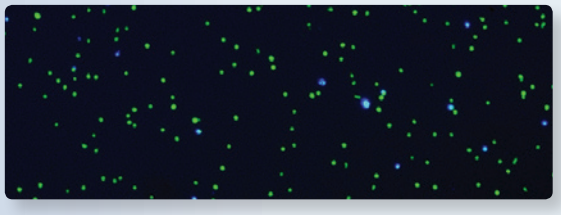
Cassettes
- High Precision

Examples:
Via1-Cassette™,
PI-Cassette™
Analyzed volume : 3,2 µl

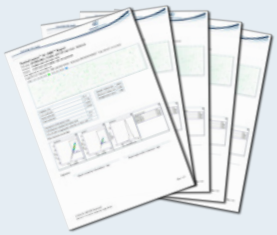
Via1-Cassette™: For high precision (CV 3-4 %)

Results

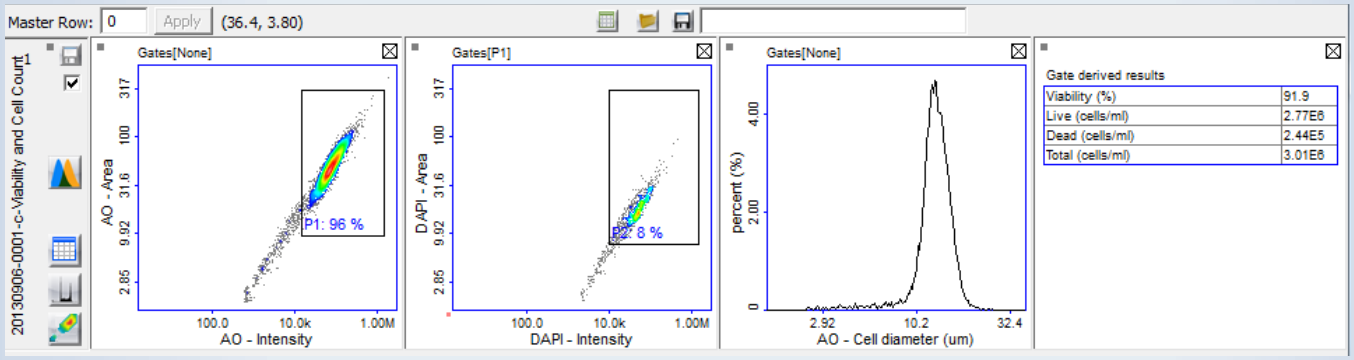
A: Viability and Cell Count Image



C: Automated PDF reports



B: Results from NC-3000™ Report Generator



Result of Viability and Cell Count Assay (A) Image showing a selection of the cells measured. All cells are stained with Acridine Orange (AO) represented by green cells. Nonviable cells are stained with DAPI represented by blue cells. (B) Report Generator showing results from the Viability and Cell Count. (C) Automated PDF reports.

For more information, please visit **www.chemometec.com/NC-3000**

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