NucleoCounting

The NucleoCounter® is the most precise cell counter in the life science market. It uses the disposable Via1-Cassette™ to combine cell sampling, staining, loading and counting into one workflow to maximize precision and eliminate human error. Simply insert the Via1-Cassette™ into your cell sample and press the plunger to load your cells. Even aggregated cells or adipose tissue derived stem cells are quantified.

The Counting Chamber

The counting chamber automatically loads and stains cells in one step. Once the Via1-Cassette™ is inserted into the NucleoCounter®, the instrument’s fluorescent microscope acquires a green and blue image for detecting live and dead cells.

The large counting chamber, which corresponds to 14 fields in a traditional hemocytometer, ensures high statistical performance when the NucleoView™ software calculates the cell concentration.

Calibration Bar Code

The exact counting chamber volume of each individual Via1-Cassette™ is measured and printed as a dot bar code during production. This bar code relays the exact counting chamber volume to the software, ensuring optimal precision when the cell concentration is calculated.

Cell Staining Channels

These staining channels are pre-loaded with dried Acridine Orange and DAPI dyes. After sample loading, the dyes dissolve and immediately stain the live and dead cells, respectively. The channels ensure consistent cell staining and prevent lab professionals from coming into contact with carcinogenic substances.

Integrated Pipette

This integrated piston and pipette tip reduce variation by simplifying the loading procedure and eliminating operator bias.

Pressing this piston creates a vacuum that pulls the cell sample into the cell staining channels.

The Via1-Cassette™ is designed for microcentrifuge tubes and requires only 60μl of cell sample.

NucleoCounting

Count cells intelligently

High Precision Cell Counting | Accurate Cell Detection | Aggregated Cells | GMP Software | Bioprocessing | Microcarriers
GMP Applications for NucleoCounting

✓ Streamlined Workflow
The NucleoCounter® is designed for production environments. Counting cells with the NucleoCounter® eliminates several steps present in conventional cell counting, reducing human error and ensuring consistent results between operators.

✓ Precise, Consistent Results
All NucleoCounter® instruments count the same regardless of location or production date. After assembly, each instrument is calibrated against a master instrument, followed by testing and QC release.

Conventional Counting

NucleoCounting™

✓ Monitoring and IQ/OQ/PQ
Simple IQ, OQ and PQ protocols make the NucleoCounter® calibration- and maintenance-free, ensuring consistency between cell counts.

The NucleoView™ software automatically generates detailed PDF reports that facilitate results monitoring and approval. These reports also provide cell size and aggregation statistics, complete with cell sample deviation diagrams.

✓ 21 CFR Part 11
Our NucleoView™ software features a 21 CFR Part 11 module to maintain paperless record systems under cGMP guidelines, making the NucleoCounter® perfect for production settings.

✓ Ideal for Cleanrooms
With a fanless design and smooth, easily cleaned surface, the NucleoCounter® eliminates contamination risks without compromising performance.

Prominent NucleoCounter® Users

Many of our clients use NucleoCounter® instruments for advanced applications such as:
- Cell therapy
- Bioprocessing
- Vaccine production
- Cell biology research

The extensive due diligence done by these companies bears witness to the NucleoCounter® line’s performance in QC and production in GMP facilities.