Technology that counts

chemometec

The NucleoCounter® YC-100™

– For total counting of yeast cells and viability

The NucleoCounter® YC-100™

The NucleoCounter® YC-100™ can be applied in the counting of yeast cells from both the pharmaceutical, biotechnology, beer and food industries.

The NucleoCounter® YC-100™ is very simple to operate, with only limited training in laboratory work.

Principle: The NucleoCounter® YC-100™ is an integrated fluorescence microscope designed to detect signals from the fluorescent dye, propidium iodide (PI) bound to DNA. Results from the NucleoCounter represent either total or nonviable cell concentration, depending on the sample preparation.

Key Benefits

of the NucleoCounter® YC-100™

- ✓ Easy operation
- ✓ 30 sec. analysis time
- ✓ No cleaning or calibration
- ✓ Maintenance and service free
- ✓ Excellent reproducibility
- ✓ Safe sample handling and disposal
- ✓ Excellent for clustering cells

The NucleoCounter® YC-100™

- A standard for Cell Counting

Brewery | Pharmaceutical | Bioethanol | Food Industry | Wine Production | *and more*

As simple as 1-2-3

Sample Preparation
Mix a representative cell sample with Reagent Y100 in the ratio 1:10

Sampling
Load the NucleoCassette with the lysate solution by immersing the tip of the cassette into the solution and pressing the piston.

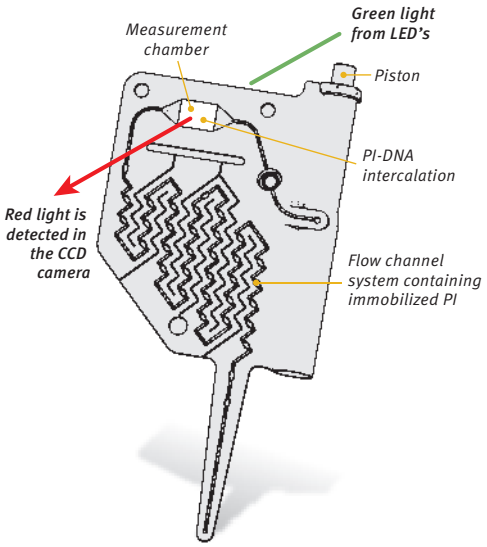
Analysis
Place the NucleoCassette in the instrument and press the "Run" key. After 30 seconds the cell count is presented on the instrument display. Optionally data is transferred to an external PC using USB connection or printed on an external printer.

The NucleoCassette™

Propidium Iodide is immobilized in the interior of the disposable NucleoCassette™. When the Cassette has been loaded with the cell lyzate the PI is dissolved and the cellular DNA is stained.

After placement in the NucleoCounter the stained mixture is automatically transferred to the measurement chamber. Green light excites the PI-DNA intercalation and the red light emitted is registered in the CCD camera for correlation into a cell count. After analysis the sample and the PI is contained inside the NucleoCassette™, which can be safely discarded. This offers a safe sample disposal.

The thickness of the measurement chamber of each NucleoCassette™ is measured during production, accurately determining the analysed volume in each measurement. This, together with durable optical components, makes the NucleoCounter® YC-100™ calibration free. As the NucleoCassette™ contains the entire flow system as well as the measurement chamber, neither cleaning nor maintenance of the NucleoCounter® YC-100™ instrument is needed.



NucleoCounter® YC-100™ Specifications

Loading volume:	60 µl is loaded into the NucleoCassette
Measurement volume:	1 µl in the measurement chamber of the NucleoCassette
Analysis time:	30 seconds
Measurement range:	5 x 10^3 to 6 x 10^6 cells/ml.
Size:	38 x 26 x 22 cm (W x H x D), weight 3 kg
Software:	NucleoView computer software for documentation and presentation - optional
Printer:	External printer for documentation - optional

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