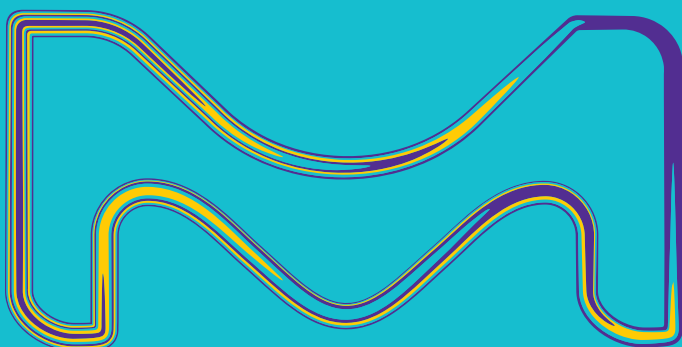


Muse[®] Cell Analyzer

Experience simple, affordable flow cytometry.



**MILLIPORE
SIGMA**

Simple, affordable flow cytometry. Now at your side.

Sophisticated cell analysis doesn't have to be exclusive, complicated or costly. With the Muse® Cell Analyzer, you can now achieve highly quantitative results at a fraction of the price, effort and time. The Muse® Cell Analyzer packs three-parameter analysis into a compact, easy-to-use benchtop device, making flow cytometry accessible to anyone, any time. A user-friendly touchscreen interface, intuitive software and optimized "Mix-and-Read" assays work to simplify your research.

- Highly quantitative data at the single cell level
- Simple, effortless operation
- Intuitive software and touchscreen user interface
- Rapid setup and analysis
- Optimized Muse® Assays
- Compact size; footprint of only 8 in. x 10 in. (20 cm x 25 cm)
- Surprisingly affordable!

Highly intuitive touchscreen interface

The Muse® instrument features a highly intuitive touchscreen interface that allows simple step-by-step operation, so easy that no flow expertise is required to run assays. The touchscreen prompts you through simple on-screen instructions and guides you through sample loading to simple setting adjustments to results—in just a few steps!

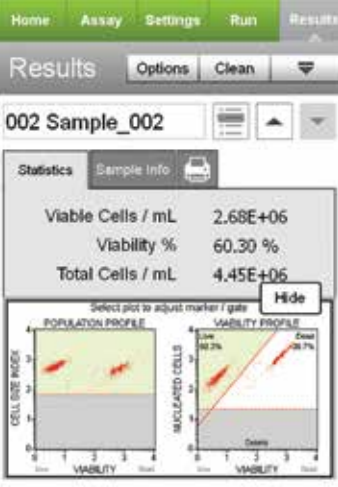
Cell analysis is effortless and fast

For the assays you rely on most, we've developed optimized kits, validated for robust performance on the Muse® Cell Analyzer. Typical cell preparation protocols have been condensed and simplified, so sample preparation is fast and easy. You don't need to optimize any software settings—the Muse® instrument calculates all gating parameters and thresholds for you. Results are displayed in both graphical and statistical formats specific to each application, making analysis unambiguous. Spend less time with experimental setup, avoid reagent waste and save money—we've done all the work for you.

Muse® Assays

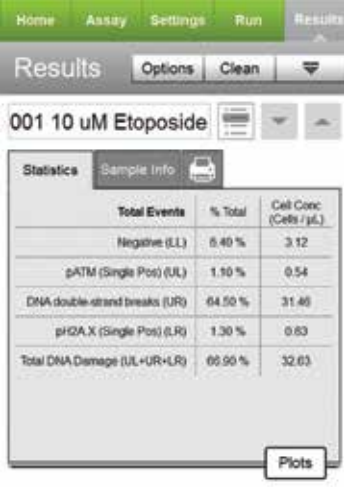
Choose from a broad range of Muse® Assays for interrogating multiple aspects of cell biology:

- Count & viability
- Cell proliferation
- Apoptosis
- Cell signaling
- Cell cycle
- DNA damage
- Autophagy
- Immunology
- Algae research




Muse® Cell Count and Viability Kit

Absolute total cell counts and viability of dead and dying cells based on differential permeability of two DNA-binding dyes.



Muse® Multi-Color DNA Damage Kit

Multiplex analysis of phosphorylated ATM and Histone H2A.X to detect extent of cellular DNA damage.

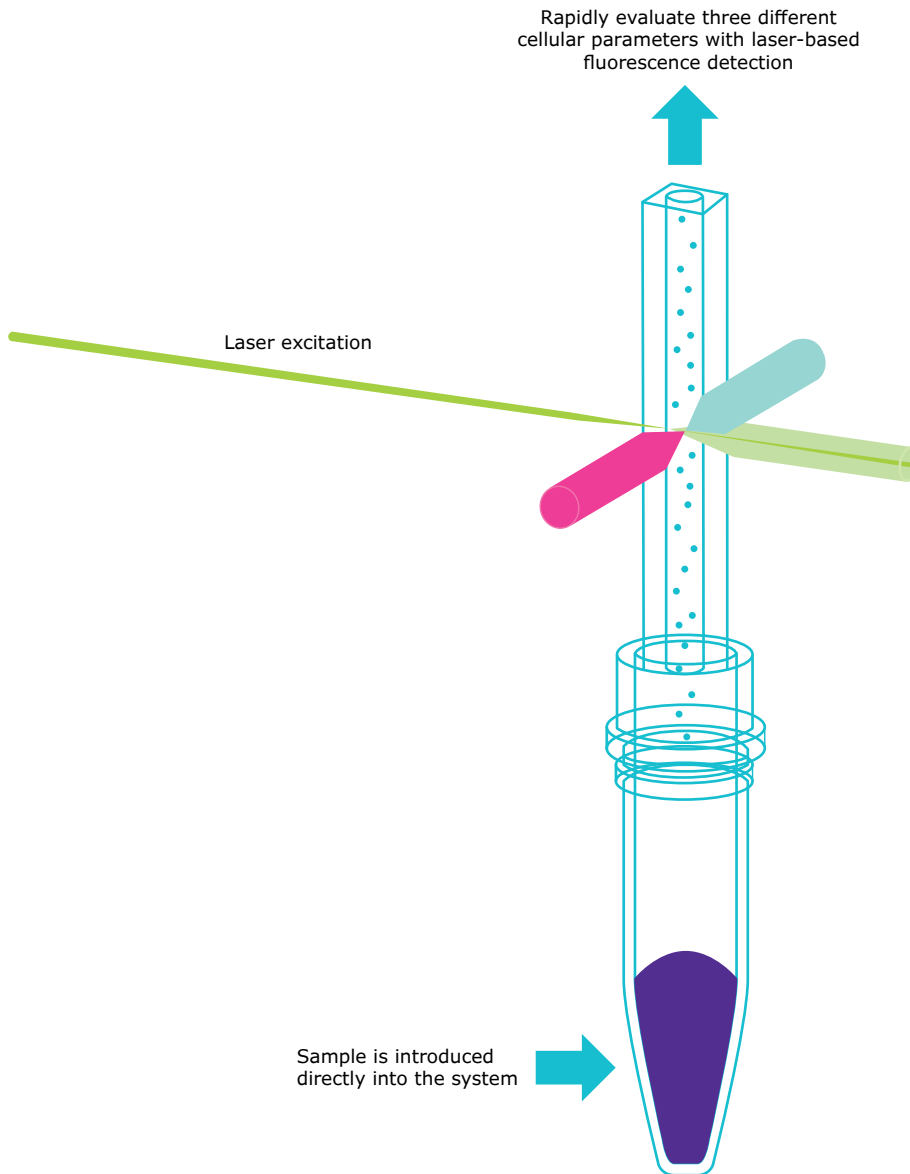


Muse® MultiCaspase Kit

Apoptosis monitoring using a single reagent detecting multiple caspase activity and a dead cell dye.

Novel, miniaturized cytometry

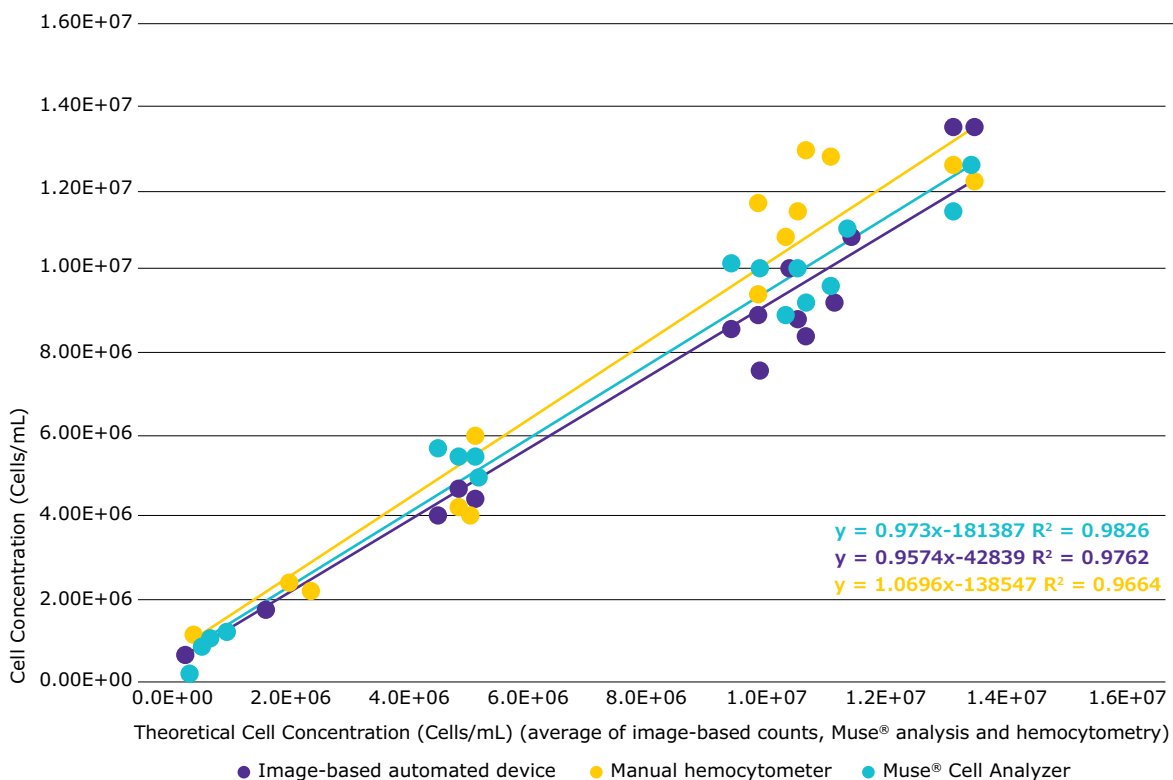
The Muse® Cell Analyzer uses patent-pending, miniaturized fluorescent detection and microcapillary technology to deliver truly accurate, precise and quantitative cell analysis compared to other methods. Versatile enough to analyze both suspension and adherent cells 2–60 µm in diameter, the Muse® Cell Analyzer provides greater accuracy and precision than other analysis methods.



Laser-Based Fluorescence Detection

The Muse® system delivers high-performance cell analysis using a microcapillary and miniaturized optics, which occupy one-tenth the space of a typical flow cytometer. Laser-based fluorescence detection of each cell event can evaluate up to three cellular parameters.

Measure more accurately and reliably



The Muse® Cell Analyzer counts cells more accurately than manual hemocytometry or image-based automated analysis. Multiple adherent and suspension cell types (MCF-7, K562, Hb, CHO-K1 and Jurkat cells) were counted using the methods shown. Cell counts from all three methods were averaged to obtain “theoretical cell concentration”. Each point represents the average of three replicates, and each data series was fit with linear regression. Muse® cell analysis data were correlated with theoretical concentration with slope closest to 1, indicating superior accuracy.

Ordering information

Muse® Assays

| Description | Catalog No. |
|--|------------------|
| Cell Health | |
| Muse® Count & Viability Kit (100 tests) | MCH100102 |
| Muse® Count & Viability Reagent (200x) | MCH100104 |
| Muse® Autophagy LC3-Antibody Based Kit (50 tests) | MCH200109 |
| Muse® RFP-LC3 Reporter Autophagy Assay Kit (100 tests) | MCH200110 |
| Muse® Count & Viability Reagent (600 tests) | MCH600103 |
| Muse® Oxidative Stress Assay (100 tests) | MCH100111 |
| Muse® Nitric Oxide Assay (100 tests) | MCH100112 |
| Muse® Ki67 Proliferation Assay (100 tests) | MCH100114 |
| Muse® Cell Cycle Kit (100 tests) | MCH100106 |
| Muse® Cell Dispersal Reagent (100 tests) | MCH100107 |
| Apoptosis | |
| Muse® Annexin V & Dead Cell Kit (100 tests) | MCH100105 |
| Muse® Caspase-3/7 Kit (100 tests) | MCH100108 |
| Muse® MultiCaspase Kit (100 tests) | MCH100109 |
| Muse® MitoPotential Kit (100 tests) | MCH100110 |
| Cell Signaling | |
| Muse® H2A.X Activation Dual Detection Kit (50 tests) | MCH200101 |
| Muse® EGFR-RTK Activation Dual Detection Kit (50 tests) | MCH200102 |
| Muse® PI3K Activation Dual Detection Kit (50 tests) | MCH200103 |
| Muse® MAPK Activation Dual Detection Kit (50 tests) | MCH200104 |
| Muse® Bcl-2 Activation Dual Detection Kit (50 tests) | MCH200105 |
| Muse® Multi-Color DNA Damage Kit (50 tests) | MCH200107 |
| Muse® PI3K/MAPK Dual Pathway Activation Kit (50 tests) | MCH200108 |
| Muse® STAT-1 Activation Dual Detection Kit (50 tests) | MCH200113 |
| Muse® EGFR/MAPK Activation Dual Detection Kit (50 tests) | MCH200114 |
| Immunology | |
| Muse® Human CD8 T Cell Kit (100 tests) | MIM100102 |
| Muse® Human CD4 T Cell Kit (100 tests) | MIM100101 |
| Muse® Human B Cell Kit (100 tests) | MIM100103 |
| Muse® Human CD25 Lymphocyte Kit (100 tests) | MIM100104 |
| Muse® Human CD69 Lymphocyte Kit (100 tests) | MIM100105 |
| Algae Research | |
| Muse® Algae Count & Viability Kit | MIA100101 |
| Muse® Algae Nile Red Kit | MIA100102 |

Instrument and Accessories

| Description | Catalog No. |
|------------------------------------|------------------|
| Muse® Cell Analyzer | 0500-3115 |
| Muse® Replacement Flow Cell | 0500-3120 |
| Instrument Cleaning Fluid (100 mL) | 4200-0140 |
| Muse® System Check Kit | MCH100101 |

Muse® Product Specifications

| | |
|--------------------|---|
| Input Cell Numbers | User selected; Cell concentration range of 10,000-500,000/mL |
| Sample Format | Single loader, < 2 minutes per sample Sample volume and number of cells counted can be specified Absolute cell counts |
| Cell Types | Homogeneous or heterogeneous, suspension or adherent, primary cells or cell lines |
| Cell Size | 2-60+ microns (µm) in diameter |
| Data Handling | Data analyzed on system, with USB export of graphs, CSV files and raw data files |

we are continually releasing new Muse® Assay Modules and kits!

Further information is available on our website: EMDMillipore.com/muse

- Video demonstration
- Most recent listing of Muse® Assays
- Application notes
- Publications
- Software updates
- and more!

Please visit EMDMillipore.com/muse for the most up-to-date listing of Muse® Assays. New assay software modules can be downloaded free of charge from the website.



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