

Experience simple, affordable flow cytometry. Muse[®] Cell Analyzer



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 3-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!

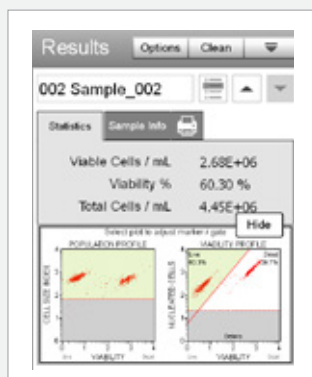
Cell Analysis is effortless and fast

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.

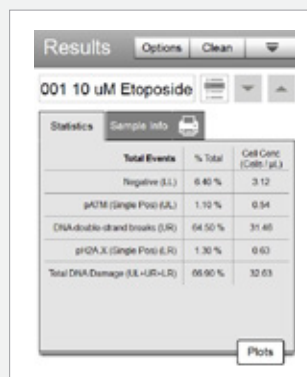
Muse® Assays

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

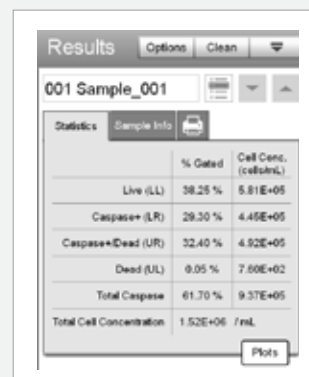
- Count & viability
- Cell proliferation
- Apoptosis
- Cell signaling
- Cell cycle
- DNA damage
- Autophagy
- Immunology



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.



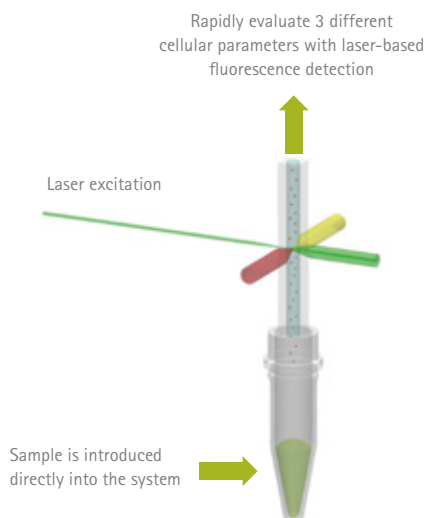
Muse® Multi-Color DNA Damage Kit
Multiplex analysis of phosphorylated ATM and Histone H2A.X to detect extent of cellular DNA damage.



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.



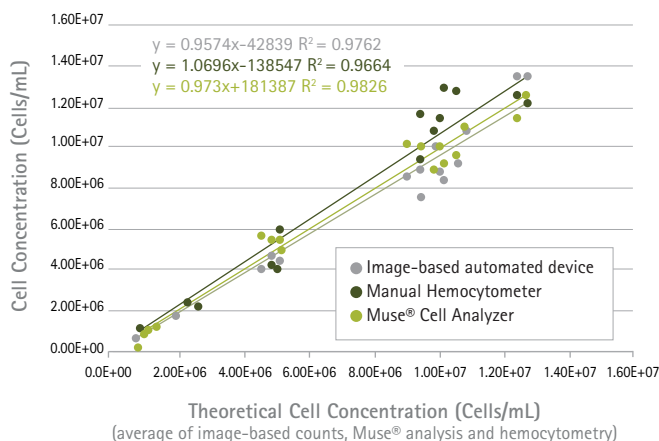
Laser-based Fluorescence Detection

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 3 cellular parameters.

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

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

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 average of 3 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

Instrument and Accessories

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

Muse® Assays

Description	Catalogue 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



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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!

Please visit www.merckmillipore.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.

To place an order or receive technical assistance

In Europe, please call Customer Service:

France: 0825 045 645

Germany: 069 86798021

Italy: 848 845 645

Spain: 901 516 645 Option 1

Switzerland: 0848 645 645

United Kingdom: 0870 900 4645

For other countries across Europe, please call: +44 (0) 115 943 0840

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