CYTEK®

TRANSCEND THE CONVENTIONAL

Cytek® Guava® Muse® Cell Analyzer

Experience Simple, Affordable Flow Cytometry.

Simple, Affordable Flow Cytometry. Now at Your Side.

Sophisticated cell analysis doesn't have to be exclusive, complicated, or costly. With the Cytek® Guava® 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.

- Sleek design creates simple, effortless operation
- Intuitive software and touchscreen interface enables rapid set-up and analysis
- Optimized Muse assays facilitate simplified protocols and a short time to answers
- Compact size; footprint of only 8 in x 10 in (20 cm x 25 cm) takes up only a small amount of precious lab bench space
- Affordable price point allows for easier access to reliable flow cytometry analysis

Highly intuitive touchscreen interface

The Muse Instrument features a highly intuitive touchscreen interface that allows for simple step-by-step operations, 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

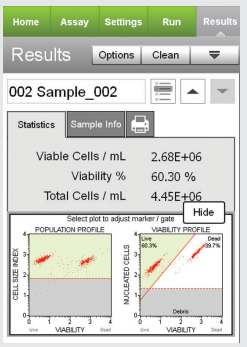
For the assays you rely on most, we've developed optimized kits validated for robust performance on the Muse cell analyzer. Typical cell preparation protocols have been condensed and simplified so sample preparation is fast and easy. You don't need to optimize any software settings—the Muse Instrument 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 set-up, 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:

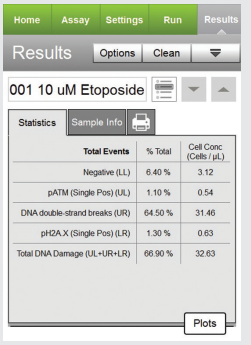
- Count and viability
- Cell proliferation
- Apoptosis
- Cell signaling
- Cell cycle
- DNA damage
- Autophagy
- Immunology
- Malaria research

Muse Cell Count & Viability Kit



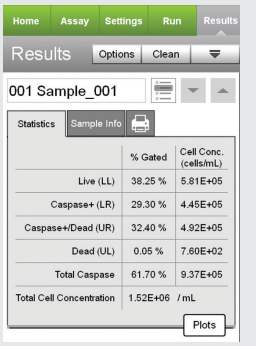
Absolute total cell counts and viability of dead and dying cells based on differential permeability of two DNA-binding dyes.

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.

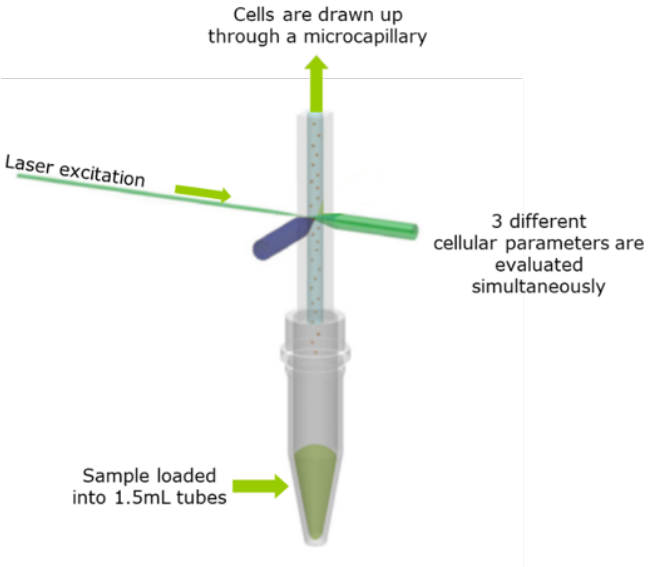
Cytek Biosciences, Inc. 47215 Lakeview Blvd, Fremont, CA 94538 1-877-922-9835 sales@cytekbio.com

Novel, miniaturized cytometry

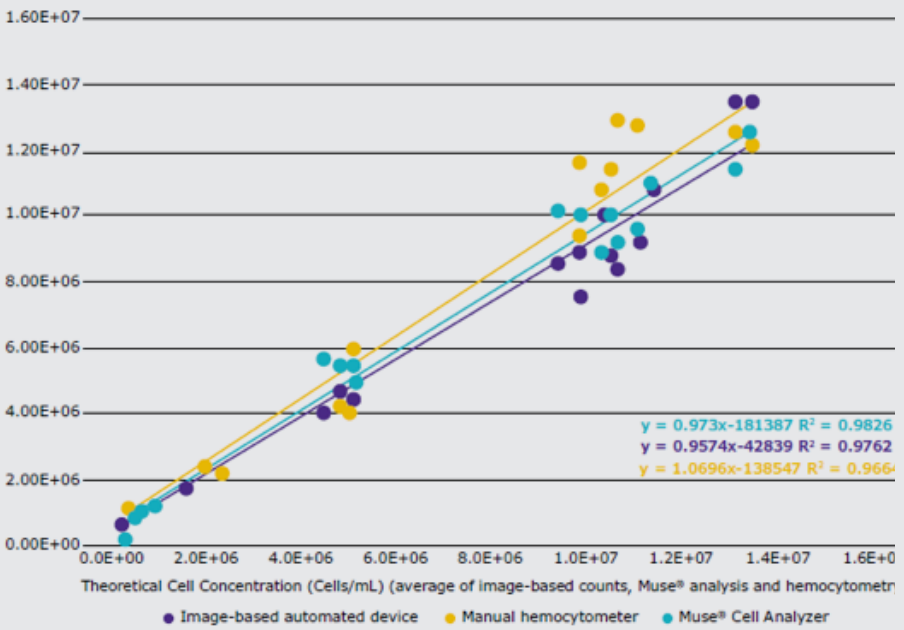
The Muse cell analyzer uses miniaturized fluorescent detection and microcapillary technology to deliver truly accurate, precise, and quantitative cell analysis compared to other methods. Versatile enough to analyze both suspension and adherent cells 2–60 µm in diameter, the Muse cell analyzer provides 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.



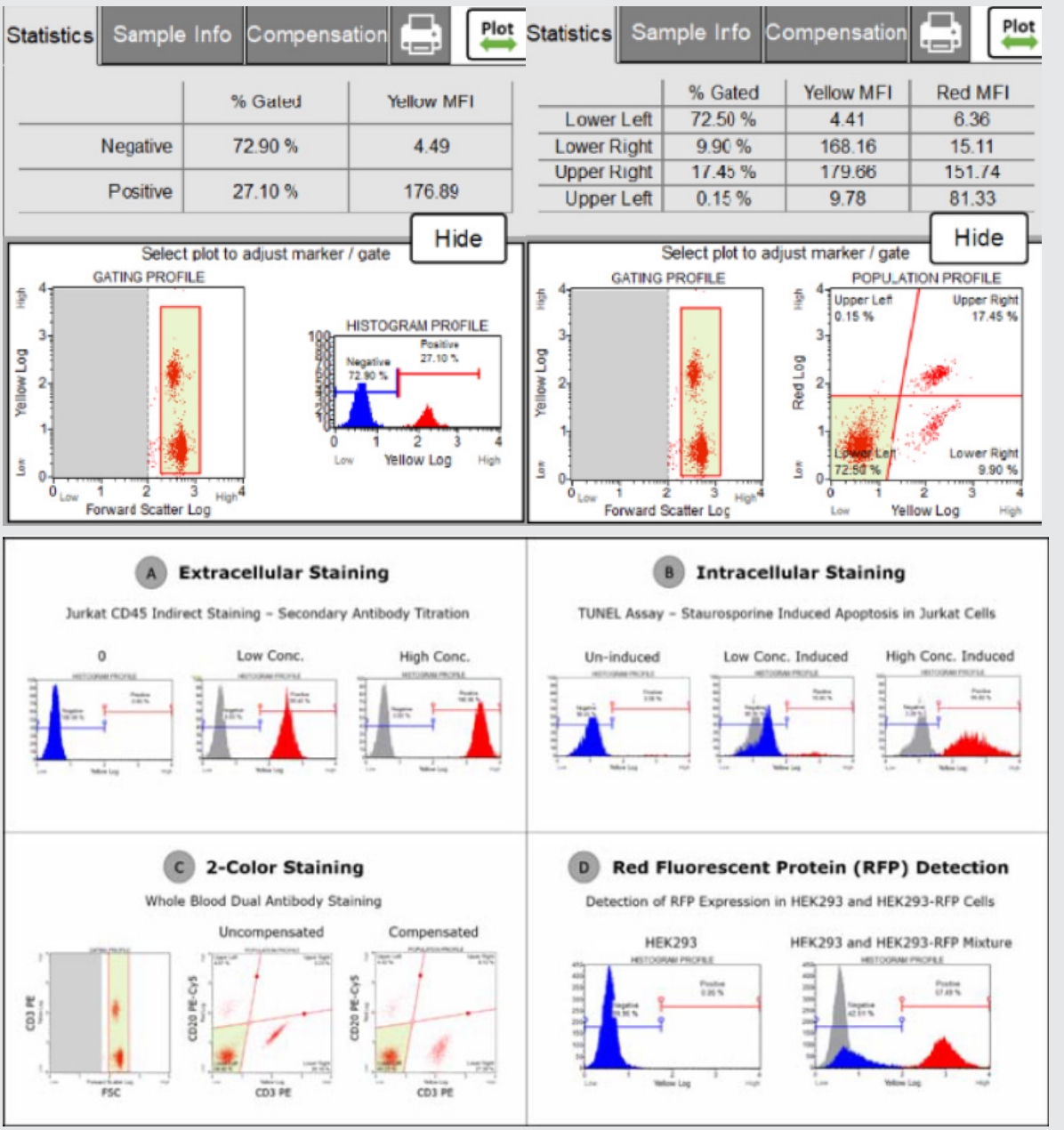
Measure more accurately and reliably



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 3 methods were averaged to obtain a “theoretical cell concentration.” Each point represents the average of 3 replicates, and each data series was fit with linear regression. Muse concentration values showed the highest correlation coefficient and slope when compared to the “theoretical cell concentration,” indicating superior accuracy.

Muse Open Modules

The Muse cell analyzer has 2 open modules, allowing the user to run their own 2-color assays. The open modules allow users flexibility to run 2-color (yellow and red fluorescence) experiments while still maintaining the simplicity of a guided software interface. Using the open modules, users can apply the system to a variety of extended problems such as: extracellular marker detection, intracellular detection, and the characterization of red fluorescent proteins and transfection levels.



Example experiment that can be performed using Muse® open module yellow: (A) Jurkat cells were stained with unlabeled anti-CD45 primary antibody and two different concentrations of PE-labeled secondary antibody. (B) Jurkat cells were induced to apoptosis by staurosporine and the TUNEL assay was performed on the cells. (C) Whole blood was stained with PE-labeled anti-CD3 and PE-Cy5 labeled anti-CD20 antibodies. (D) Red fluorescent protein (RFP) expression was tested using untransfected HEK293 and RFP transfected HEK293-RFP cells lines.

Cytek Biosciences, Inc. 47215 Lakeview Blvd, Fremont, CA 94538 1-877-922-9835 sales@cytekbio.com

Ordering Information

Muse® Assays

Product Name	Part Number
Cell Health	
Muse® Count & Viability Kit (40 mL)	MCH100102
Muse® Count & Viability Reagent (200x) (100 tests)	MCH100104
Muse® Autophagy LC3-Antibody Based Kit (50 tests)	MCH200109
Muse® Count & Viability Reagent (240 mL)	MCH600103
Muse® Oxidative Stress Kit (100 tests)	MCH100111
Muse® Nitric Oxide Kit (100 tests)	MCH100112
Muse® Ki67 Proliferation Kit (100 tests)	MCH100114
Muse® Cell Cycle Kit (100 tests)	MCH100106
Muse® Cell Dispersal Reagent (100 tests)	MCH100107
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	MCH200108

Product Name	Part Number
Apopotsis	
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
Immunology	
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
Protein Detection	
Muse® P.f.-P.v. Antigen Detection Kit (100 tests)	MPA100101
Guava® SARS-CoV-2 Multi-Antigen Antibody Kit (100 tests)	FCPA100101

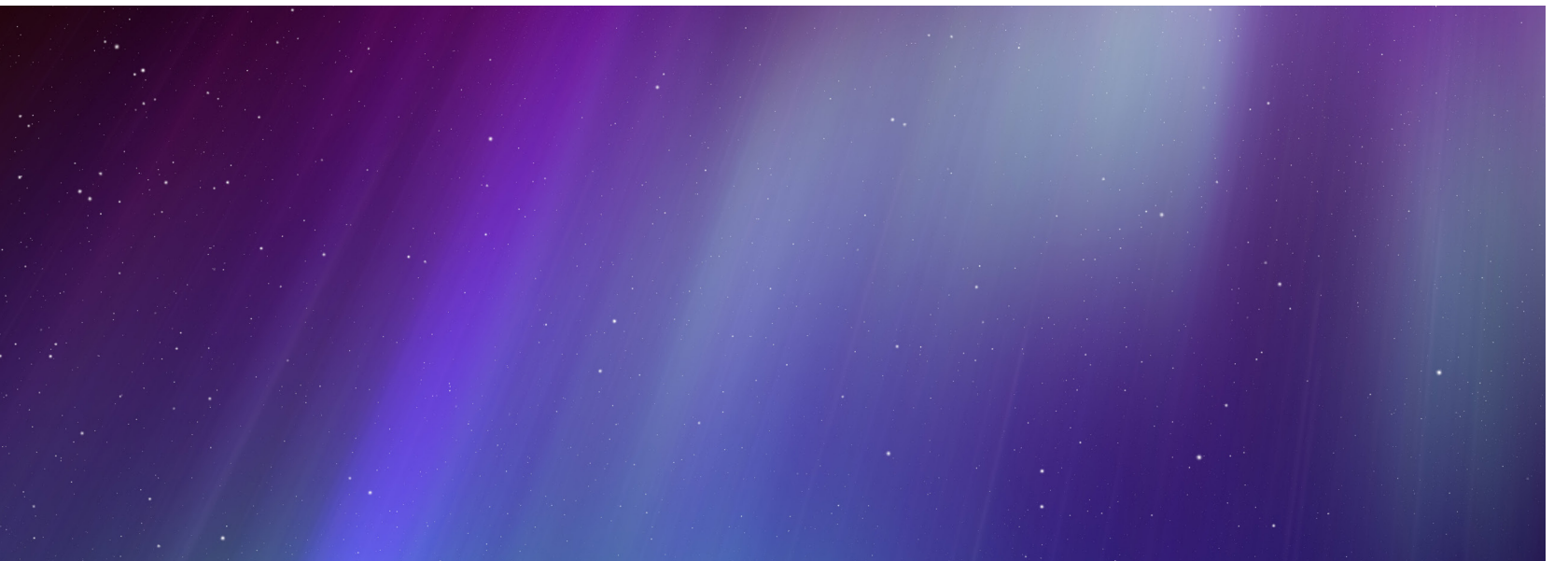
Ordering Information

Instruments and Accessories

Product Name	Part Number
Cytek® Muse® Cell Analyzer	0500-3115
Muse® Replacement Flow Cell	CN-0454-01
Guava® Instrument Cleaning Fluid	4200-0140
Muse® System Check Kit	MCH100101
Muse® Yellow and Red Open Modules	0110-8617

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!

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

For Research Use Only. Not for use in diagnostic procedures.

BR432714
April 2023

CYTEK®

TRANSCEND THE CONVENTIONAL