



CYTEK[®]
TRANSCEND THE CONVENTIONAL



Cytek[®] Muse[®] Micro Cell Analyzer

Technical Specifications

Unique Capabilities And Benefits Of The Cytex Muse Micro Cell Analyzer

This document confirms that as of March 18, 2025, Cytex Biosciences is the sole manufacturer of the Cytex Muse Micro cell analyzer.

Patented Flow Cell:

- Requires no alignment following replacement
- Is user replaceable
- Has a high-pressure purge available to remove obstructions
- Is comprised of fused silica with a polyimide coating
- Aspirates sample using a high precision micro-syringe
- Provides a unique advantage by performing accurate absolute cell counts and calculating cell percentages without the need to spike reference beads into individual samples, reducing added cost and manipulation

Patents:

The Cytex Muse Micro system, and uses thereof, are the subject of issued U.S. patents and foreign equivalents, including the following U.S. patents:

- 8,885,153; 8,184,271 and 7,847,923 - Differentiation of flow cytometry pulses and applications
- 8,959,448 and 10,140,419 - Graphical user interface for analysis and comparison of location-specific multiparameter data sets



Technical Specifications

Product Name

Cytex Muse Micro cell analyzer

Part Number

N7-00141

Cytex Muse Micro cell analyzer - 3 channel

N7-00142

Cytex Muse Micro cell analyzer - 5 channel

Product Description

Novel instrument for rapid, convenient, and quantitative fluorescence-based phenotyping and characterization of cell health or stress parameters

Ultra Compact Size – Fits Neatly On Bench Space

Dimensions (W x D x H)

206.37 x 282.15 x 220.75 mm
(8.12 x 11.11 x 8.69 in)

Weight

13.1 lb (5.9 kg)

Operating Environment (Temperature)

16°C to 35°C (60°F to 95°F)

Five Parameter, Fluorescent-Based Detection For Maximum Accuracy

Detection of single cell voltage pulse for maximum accuracy; three colors plus forward scatter and side scatter

Optics – Excitation Wavelength

Blue laser (488 nm)

Optics – 3 or 5 Detection Channels

N7-00141 Cytex Muse Micro cell analyzer - 3 channel

Forward scatter signal is detected at laser wavelength

Yellow fluorescence is detected within 28 nm bandwidth centered at 576 nm

Red fluorescence is detected within 30 nm bandwidth centered at 680 nm

N7-00142 Cytex Muse Micro cell analyzer - 5 channel

Forward scatter signal is detected at laser wavelength

Side scatter signal detected at laser wavelength

Green fluorescence is detected within 30 nm bandwidth centered at 525 nm

Yellow fluorescence is detected within 28 nm bandwidth centered at 576 nm

Red fluorescence is detected within 30 nm bandwidth centered at 680 nm

Fluidics

Rectangular (1.5 mm x 0.8 mm) microcapillary with 100 µm round bore

Positive displacement pump

Absolute Count Capability

Yes, without external beads

Sensitivity

<125 MESF (FITC), <50 MESF (PE), and <150 MESF (PE-Cy5)

Dynamic Range

Five decades

Highly Intuitive Software Interface And Sensitive Touchscreen

Intuitive and guided menus to generate data output designed for each experimental application

Touchscreen provides ease of use operation

Convenient Results Display

Data presented in summary format, dot, or histogram plots

Dedicated Assay-Specific Software Programs Included

Fully optimized software modules for dedicated reagents ensuring accuracy and intuitive analysis

Software Options For User Defined Samples

Easy-to-use open modules optimized for one to three color assays

Open InCyte™ software featuring a simplified acquisition and analysis workflow for user specific assays with up to five parameters

Dedicated Reagents For Cell Health, Cell Signaling, And Immune Cell Identification Applications

Fully optimized reagents for:

- Count and viability, apoptosis, cellular stress, and cell cycle analysis
- Cell signaling pathways
- Immune cell characterization

Sample Format

Single loader; sample volume and number of events to acquire can be specified

Minimal Sample Volume

Minimum/absolute sample volume needed: 200 µL

Sample volume acquired depends on cell concentration

Sample dead volume: 50 µL

User-Specified Input Cell Numbers

User-defined; cell concentrations of 10,000 to 1,000,000 cells/mL

Rapid Sample Processing Time

<2 minutes per sample

Suitable For Multiple Cell Types

Homogeneous or heterogeneous cells, suspension, or adherent

Primary cells or cell lines

Mammalian, bacteria, and yeast cell

Recommended Cell Size

Size range: 0.5–60 µm in diameter

Data File Structure

Output data file formats:

- Binary data storage in Flow Cytometry Standard (FCS) 3.0 format
- Spreadsheet results file in comma-separated value (CSV) format
- Report results in a portable document format (PDF)

Computer

Embedded 1.6 GHz Intel Celeron N3160 with 8 GB RAM and 390 GB data storage

External Power Supply (Input Voltage Range)

100–240 VAC, 50/60 Hz 80 W

Main Unit (Input Voltage)

15 VDC, 5 A

Rapid Sample Processing Time

Auto resettable

Flow Rate

7–70 µL/min

Sheath Fluid

None

Waste

50 mL from 8 hours of continuous use



Technical Support

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For more information about our products and solutions, please visit www.cytekbio.com

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