

Cellometer[®] Spectrum

Image Cytometry System
for 20 µl Cell-Based Assays

Cell Cycle
Apoptosis
Cell Mediated Cytotoxicity
Cell Counting and Viability
Interchangeable Fluorescent Modules



Features of the Spectrum™ Image Cytometry System

✓ All-in-One System

Basic cell counting, primary cell viability, and cell-based assays.

✓ Dual-Fluorescence for Accurate Primary Cell Viability

No interference from red blood cells. Analyze bone marrow, peripheral blood, and cord blood without lysing.

✓ Unique Algorithms for Advanced Cell Analysis

Determine concentration and viability of hepatocytes, adipocytes, and other sophisticated cell types.

✓ Fast Results

Obtain cell images, counts, size measurements and viability calculations in < 30 seconds per sample.

Simple 20 µl Cell-Based Assays

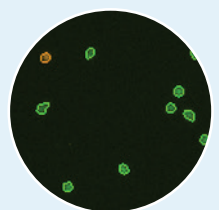
- Pre-qualified reagents
- Small 20 µl sample size
- Simple, image-based analysis
- Pre-defined instrument settings
- Assay-specific data templates
- Accurate, consistent results



1. Pipette 20 µl



2. Insert slide & count



3. Get images & data

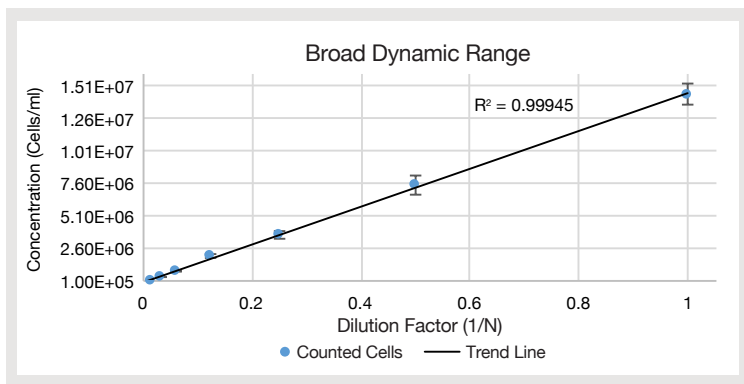
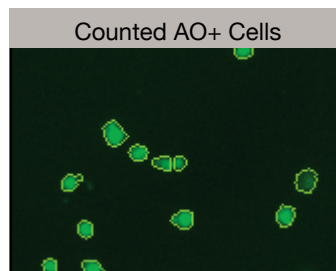
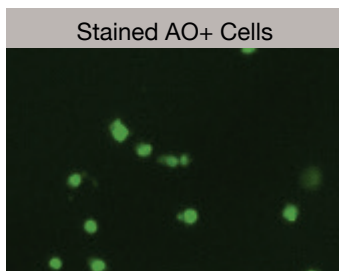
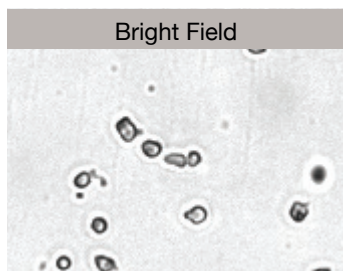
Cell Types for Many Research Areas

Cellometers are optimized for primary cell analysis

PBMCs	Epithelial Cells
Stem Cells	Keratinocytes
Adipocytes	Lymphocytes
Neural Cells	Splenocytes
Hepatocytes	Monocytes
Dendritic Cells	

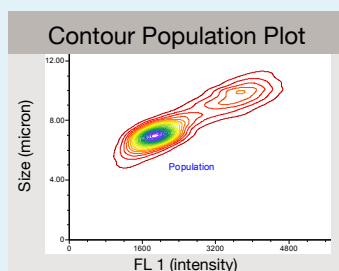
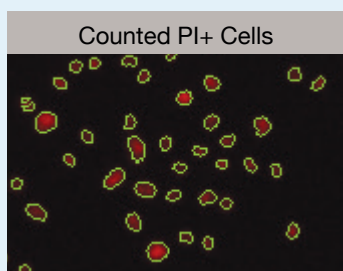
- **Clinical Immunology:** PBMCs
- **Diabetes / Obesity:** Adipocytes
- **Immunotherapy:** Leukocytes
- **Microbiology:** Yeast (Spectrum 10x)
- **Oncology:** Cell Lines
- **Regenerative Medicine:** Stem Cells
- **Toxicology:** Hepatocytes
- **Transplantation:** Nucleated Cells
- **Vaccine Development:** Splenocytes

Accurate Cell Counting

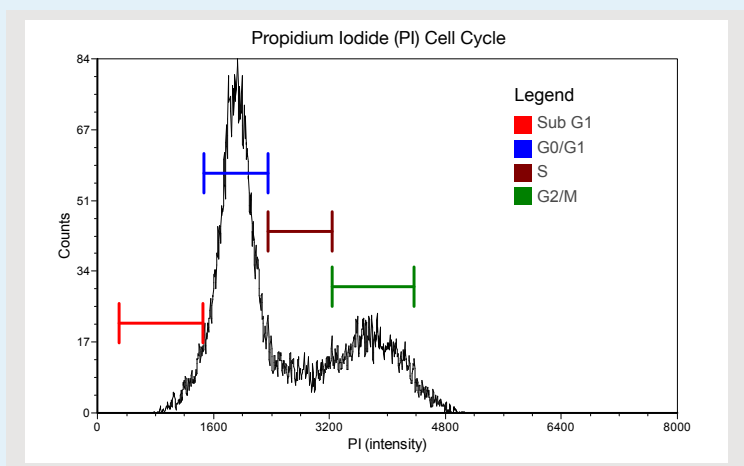


- Automatic identification of Acridine Orange (AO) stained cells (shown above)
- Image and count up to 1.51×10^7 cells/mL
- Image acquisition and analysis: 30 seconds/sample for a 3-channel assay
- Versatile platform - use for routine cell counting and complex cell-based assays

Export to FCS Express* for Flow-Like Data



- Export image data into flow cytometry software: FCS express
- Simple work flow: No fluid- stream, No PMT voltages, No forward/side scatter
- Easily perform data analysis using pre-designed templates
- Quickly plot cell population data as a: histogram, scatter plot, dot plot or contour plot



Cell Population	% of Gated Cells	Concentration (10^6 cells/mL)
Total	100	9.2
Sub G1	4.7	0.1
G0/G1	58.0	5.8
S	13.4	1.3
G2/M	23.9	1.9

* FCS Express Flow Cytometry software is a product of De Novo Software and is included with the Cellometer Spectrum™

User-Changeable Fluorescence Optics Modules*

Cellometer assays use specific optic modules for maximum performance and discrimination between fluorescence channels. Standard modules are listed in the table below. Custom fluorescence optics modules are also available.

Optics Module	Fluorophores	Nucleic Acid Stains
VB-450-302 Ex: 375 nm Em: 450 nm	AlexaFluor® 350 CFP	DAPI Hoechst 33342 Hoechst 33258
VB-535-402 Ex: 475 nm Em: 535 nm	GFP Calcein FITC AlexaFluor® 488	AO (acridine orange) SYTO®9, SYTO®13 SYTOX®Green SYTO®BC
VB-595-502 Ex: 525 nm Em: 595 nm	AlexaFluor® 546 AlexaFluor® 555, Cy3® PE (R-phycoerythrin) Rhodamine B	PI (propidium iodide) EB (ethidium bromide) SYTOX® Orange
VB-660-502 Ex: 540 nm Em: 660 nm	RFP 7-AAD Nile Red	PI (propidium iodide) EB (ethidium bromide)
VB-695-602 Ex: 630 nm Em: 695 nm	AlexaFluor® 647, Cy5® APC (allophycocyanin)	SYTOX® Red

*This table is a partial list of compatible fluorophores, nucleic acid stains, and fluorescent proteins. Please contact Nexcelom technical support regarding compatibility of other reagents.

Sytox, AlexaFluor, and Cy are trademarks of Life Technologies.

Nous contacter

OZYME
Des femmes et des hommes
au service de vos recherches

Service technique

Réactifs : 01 34 60 60 24 - tech@ozyme.fr

Instrumentation : 01 30 85 92 88 - instrum@ozyme.fr