

revvity

Multiplexity without complexity.

Cellaca PLX image cytometry system for immunophenotyping, cell counts, and viability readouts

The Cellaca™ PLX system with Matrix™ analysis software and dedicated reagents and consumables provides a benchtop solution for accurate measurements of small sample volumes to easily perform rapid subpopulation analysis for downstream processing.

Multiplexing made easy

The Cellaca PLX image cytometry system is easy to use, performing simple yet sensitive cell counts, rapid viability readouts and multiplex analysis in seconds.

Small sample volume

The sample-efficient Cellaca PLX requires 15 μ L – 50 μ L per single sample analysis. That's 10 – 30 times less sample volume required per test, compared to a flow cytometer.



Speed with sensitivity

The time to downstream processing is shortened by multiplexing with four channels with viability readouts at one minute per sample.

Optimized assays and kits

The simple-to-use, mix, incubate, wash, and read reagent kits provide immunophenotyping plus viability multiplexing assays using disposable, low fluorescence consumables. Assay kits include:

- 1. Immune cell Phenotyping
- 2. Apoptosis detection
- 3. High-Throughput cell viability
- 4. Fluorescent protein analysis

Low auto-fluorescent consumables

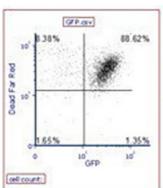
Allow for accurate surface marker detection.

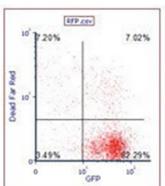
Automation ready

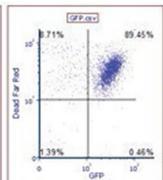
Compatible with robotic integration and automated liquid handling systems.

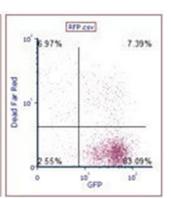
Expert support for assay development

On-site, remote, and hybrid training are available to assist with initial setup and continued assay support for improved workflows.









| | Cell popualation (%) | Concerntration (x 10^6 cells/mL) |
|-------------------|----------------------|----------------------------------|
| | Cells counted: 3845 | 1.36 |
| GFP+ | 89.9 | 1.36 |
| Viability of GFP+ | 1.5 | 0.03 |
| | | |
| Sample 2 | Cells counted: 4239 | |
| GFP+ | 89.3 | 1.89 |
| Viability of GFP+ | 92.1 | 1.65 |
| | | |
| Sample 3 | Cells counted: 2987 | |
| GFP+ | 91.3 | 0.89 |
| Viability of GFP+ | 3.2 | 0.00 |
| | | |
| Sample 4 | Cells counted: 3376 | |
| GFP+ | 90.7 | 1.07 |
| Viability of GFP+ | 93.1 | 0.98 |

Assay information

Assay: PLX_FL Protein_RedDot2 + Hoechst

Plate name: K-562-GFP Date of experiment: 8/8/2022

Optics Module 1: Blue Optics Module 2: Green Optics Module 3 Fair Red Exposure Time: 600 msec Exposure Time: 75 msec Exposure Time: 1200 msec

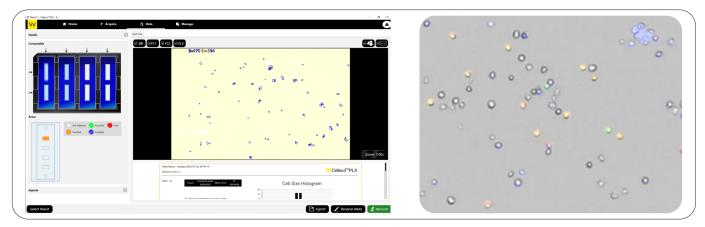
Instrument: Ceilaca PLX

Simultaneous data acquisition and analysis for rapid viability results as well as automatic export of immunophenotyping data into pre-existing templates for easy analysis

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Stress-free software

Optimized protocols streamline surface marker staining, viability, and apoptosis analysis with step-by-step methodologies and customizable result presentations.



The image above shows the Matrix software. Within the software, users are able to overlay multiple channels and images. In the example to the right, 4 images are overlayed, a brightfield and three fluorescent images.

Cellaca MX and Cellaca PLX: The Choice Is Yours

| | Cellaca PLX | Cellaca MX AOPI |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Channels | Brightfield, Blue, Green, Orange, Red, Far Red | Brightfield, Green, Red |
| Number of Fluorescent Channels | 13 (6 per scan) | 3 (2 per scan) |
| Excitation LED | 370 nm, 475 nm, 531 nm, 628 nm | 470 nm, 527 nm |
| Emission Filters | 452 nm, 534 nm, 605 nm, 655 nm, 692 nm | 534 nm, 655 nm |
| Commonly Used Compatible Dyes and Assays | Trypan Blue, AO/PI, Hoechst, DAPI, GFP, RFP, CMFDA, Calcein AM, 7AAD, Annexin V, PE, APC, KIRAVIA Blue 520™* | Trypan Blue, AO/PI, Calcein AM, Annexin V, Caspase 3/7 |
| Counting Speed | Fluorescence 4-channel scan in 1 minute (per plate) | Trypan Blue - 2 seconds Fluorescence 2-channel scan - less than eight seconds (per well) |
| Volume | 15 μL in slides 50 μL – 200 μL in counting plates | 50 μL - 200 μL in counting plates |
| Size/Diameter Range | 5 μm - 80 μm | 5 μm - 80 μm |
| Concentration Range | 1x10 ⁵ - 1x10 ⁷ cell/mL | 1x10 ⁵ - 1x10 ⁷ cell/mL |
| IQ/OQ Option | Yes | Yes |
| 21 CFR Part 11 | Yes | Yes |

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