



Automated cell counters for single cell sequencing.

Scientists in single cell analysis choose Revvity cell counters

- Low sample volume
- Cell and nuclei counts for cell lines and primary samples
- Ability to count isolated nuclei from messy samples
- Automated assessment of cell clumps
- Broad dynamic range for concentration and viability measurement

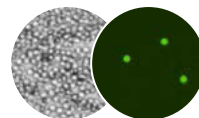
When cell counting results are critical

The field of single-cell analysis is advancing rapidly and continues to provide novel insights into diverse applications, such as gene expression dynamics and disease pathogenesis.

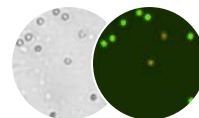
Obtaining accurate cell counts is critical in sample preparation for single-cell sequencing.

Elevated accuracy from cell lines to primary samples – including clumpy cells

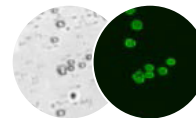
The Cellometer™ Ascend and Cellaca™ MX cell counters can be customized to handle a variety of cell types (primary cells, tumor digest, insect cells, cell lines, fragile cells, clumpy cells and more) at low or high concentrations.



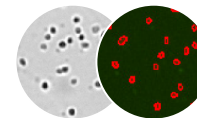
CORD BLOOD



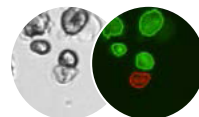
MOUSE SPLENOCYTES



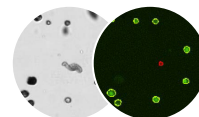
PBMCs



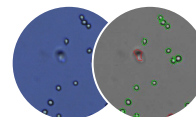
ISOLATED NUCLEI
FROM SPLEEN



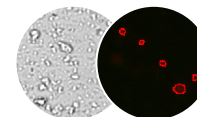
HEPATOCYTES



MELANOCYTES



SF9 CELLS



FIXED NEURONS

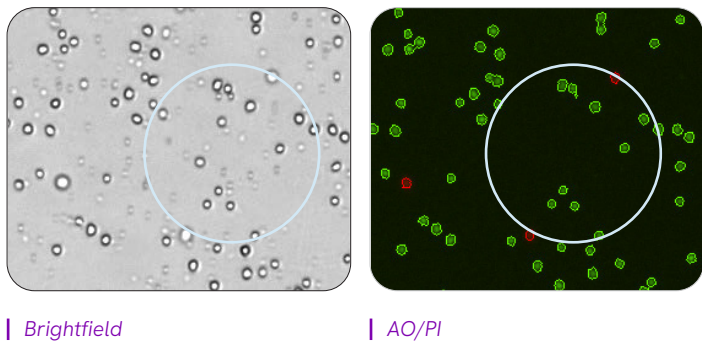


Low sample volume, complete counts

The Cellometer Ascend and Cellaca systems use only 10 - 25 µl for counts.

Dual fluorescent staining counts only nucleated cells

The brightfield image on the left shows the combination of nucleated cells, red blood cells, and platelets present in the sample. The red blood cells are not visible in the fluorescent image on the right, only the live (green) and dead (red) nucleated cells are counted.

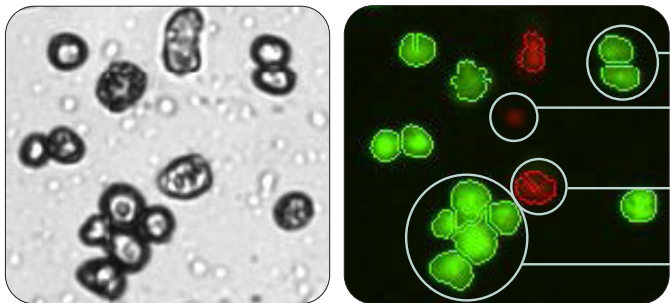


| Brightfield

| AO/PI

Specialized algorithm for clumpy cells

The fluorescent image (far right) shows bright green acridine orange (AO) positive hepatocytes declustered by the Cellometer algorithm. Red circled hepatocytes are PI positive (dead) while free nuclei are not counted.



| Brightfield

| AO/PI

Live AO positive

Free nuclei are not counted

Dead, PI positive

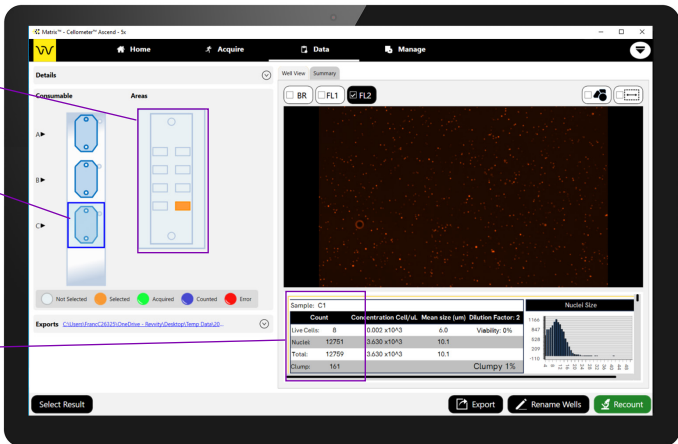
Declustered clumpy cells accurately counted

Cellometer Ascend:

- Image 2, 4 or 8 areas per chamber
- Choose a 3 or 8 chamber slide (3 chamber slide shown)
- Concentration range is from 2×10^4 – 4×10^7 cells/mL

Matrix™ software

- Number of live cells
- Number of nuclei
- Number of clumps



Custom applications:

- Viability for primary samples
- Viability for “fragile cells”
- Viability for pigmented cells
- Total nuclei count
- QA/QC for nuclei isolation and aggregates
- Trypan Blue count for SF9 cells

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