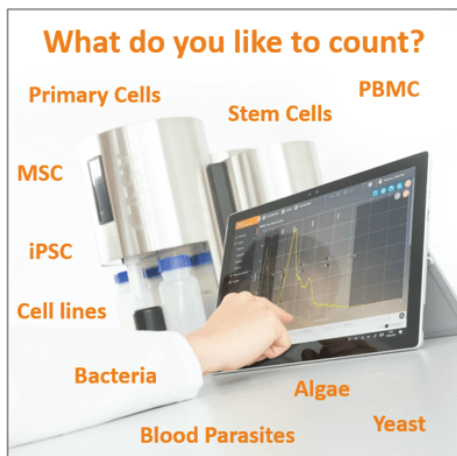


Revolutionizing Cell Counting & Analysis with Precision and Efficiency



The CASY Cell Counter & Analyzer is at the forefront of cellular analysis technology, offering unparalleled precision and efficiency. Designed for the demanding needs of modern laboratories, this state-of-the-art instrument provides accurate, reliable, and rapid cell counting and analysis, enabling scientists to focus on groundbreaking research and results.

- **Versatile Sample Compatibility:** Able to count **large stem cell aggregates** to **PBMCS** to **small yeast or bacteria**.
- **Accurate Cell Counting and Viability Assessment:** Utilizes cutting-edge technology to offer precise cell counts and viability assessments, ensuring data integrity for your research.
- **Minimal Sample Preparation:** Requires **no dyes or reagents** for cell counting, preserving sample integrity and reducing consumable costs.
- **Proven:** Thousands of publications and installations.
- **Meets Regulatory Needs:** GMP/GLP Compliant, optional 21CFR Part 11 module available.

Benefits

For years, CASY has been a reliable workhorse in cell-culture laboratories. Thousands of satisfied users prove the robustness, reproducibility, and reliability of the system. When you implement the CASY into your laboratory workflow you will realize several benefits, including:

- **Increase Laboratory Efficiency:** Streamlines the cell counting process, allowing more time for critical analysis and less time on routine tasks.
- **Cost-Savings:** Reduces the need for consumables and minimizes waste, offering an environmentally friendly and cost-effective solution for cell analysis.
- **Scalability:** Whether you're running a small lab or a large research institution, the CASY is scalable to meet your specific research demands.

Applications

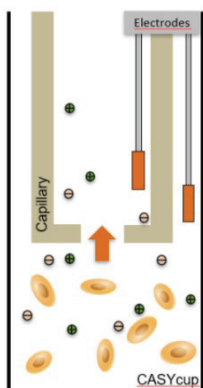
The CASY Cell Counter & Analyzer is the perfect tool for a wide range of applications, including but not limited to:

- Cell culture monitoring
- Cancer research
- Stem cell research
- Immunology
- Toxicology studies



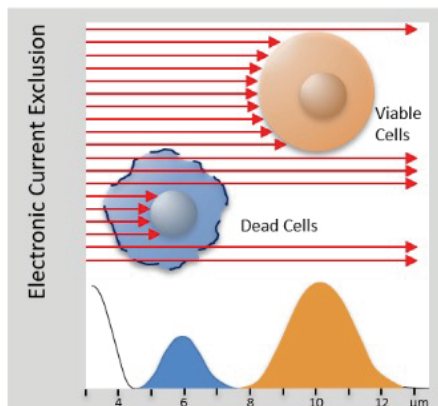
CELL
Microsystems®

How it Works



CASY counts not with a flat image, but with three dimensions. CASY measures the conductivity between 2 electrodes separated by a defined pore. Cells are suspended in CASYton, a defined buffer solution. Cells pass through the pore and generate an electrical pulse that correlates with the volume of the cell with a GMP/GLP compliant precision, allowing a maximum variation below $\pm 2\%$.

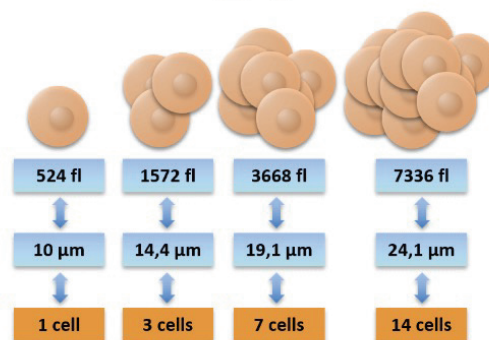
CASY also counts cells using Electronic Current Exclusion (ECE) and Pulse Field Analysis to enable the accurate determination of viability **without any influence by other variables such as staining or focusing**. Viable cells with full cell volume are detected as the cell membrane provides a barrier for current, while dead cells with no membrane resistance have their nucleus detected.



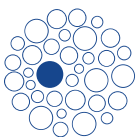
Aggregation – not a problem

As CASY determines the volume of each cell with a precision of $\pm 2\%$, it does the same with aggregates. Unlike optical measurements, which either ignores aggregates or tries to draw some rings into rather low contrast images of them, CASY uses a mathematically correct, volume-based aggregation correction. Basically, CASY will see how often a single cell fits into each detected aggregate. Mean volume and size even indicate changes in the level of aggregation, for example with induced Pluripotent Stem cells (iPSC).

Volume based aggregation correction



For more information, visit cellmicrosystems.com



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