



Cell Counting

Automated Cell Counting System

TC20™ Automated Cell Counter

With its innovative auto-focus and sophisticated cell counting algorithm, the TC20 automated cell counter eliminates subjectivity while delivering reliable counts of mammalian cells in 30 seconds.

- **Compatible with a broad range of cell sizes and types** — counts cell lines, primary cells (from tissue or blood), and stem cells
- **Innovative auto-focus technology** — removes the variation associated with manual focusing and leads to precise cell counts in 30 sec
- **Cell size gates** — user selects a population of interest in complex samples, such as primary cells, or lets the cell counting algorithm do all the work
- **Cell viability** — analyzes cells accurately using multifocal plane analysis
- **Easy to archive and analyze** — stores up to 100 counts in the onboard memory for access any time, or use the optional TC20 data analyzer software on your PC to further analyze exported cell images

Upon insertion of a counting slide, the TC20 provides a total cell count with or without staining and assesses cell viability via trypan blue exclusion. To determine if a cell is viable, the TC20 counter analyzes each cell on images acquired from multiple focal planes during the focusing step. Auto-focus and multifocal plane analysis reduce counting bias associated with manual focusing.

Accuracy is comparable to results obtained with a hemocytometer. The TC20 counter can count cells with a 6–50 μm cell diameter and within a broad concentration range of 5×10^4 – 1×10^7 cells/ml, which eliminates the need to dilute cells, thus reducing the errors associated with sample dilutions prior to counting.

For complex samples composed of multiple cell populations, such as primary cells, the position of cell size gates can be adjusted to define the population of interest.

Results from 100 previous counts are stored in the TC20 cell counter and can be exported via the USB port. Images of cells can be further analyzed on a computer using the TC20 data analyzer software.

For More Information

Web: bio-rad.com/TC20

Request or download bulletins: 6282 and 6283



Learn More about the Technology

Web: bio-rad.com/tech/cellcounting



TC20 Automated Cell Counter, Counting Slides, and Trypan Blue

Ordering Information

Catalog #	Description
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TC20 Automated Cell Counter

1450102	TC20 Automated Cell Counter , 120–240 V, includes instrument, power supply, USB flash drive, 30 dual-chamber counting slides (60 counts), 1.5 ml trypan blue
1450103	TC20 Automated Cell Counter with Thermal Label Printer , 120–240 V, includes instrument, power supply, USB flash drive, USB cable, thermal label printer, 1 roll of 500 labels, 30 dual-chamber counting slides (60 counts), 1.5 ml trypan blue

Kits and Reagents*

1450003	Counting Kit , includes 30 dual-chamber counting slides (60 counts), 1.5 ml trypan blue
1450013	Trypan Blue , 0.4% in 0.81% sodium chloride and 0.06% potassium phosphate dibasic solution, sterile filtered, sufficient for 150 counts (10 µl/count), 1 x 1.5 ml
1450021	Trypan Blue , 0.4% in 0.81% sodium chloride and 0.06% potassium phosphate dibasic solution, sterile filtered, sufficient for 750 counts (10 µl/count), 5 x 1.5 ml
1450022	Trypan Blue , 0.4% in 0.81% sodium chloride and 0.06% potassium phosphate dibasic solution, sterile filtered, sufficient for 1,500 counts (10 µl/count), 10 x 1.5 ml
1450015	Counting Slides , 150 dual-chamber counting slides (300 counts)
1450016	Counting Slides , 300 dual-chamber counting slides (600 counts)
1450017	Counting Slides , 600 dual-chamber counting slides (1,200 counts)
1450018	Counting Slides , 900 dual-chamber counting slides (1,800 counts)
1450019	Counting Slides , 1,200 dual-chamber counting slides (2,400 counts)
1450020	Counting Slides , 2,400 dual-chamber counting slides (4,800 counts)
1450014	System Test Kit , includes verification slide, instructions

Accessories*

1450005	Thermal Label Printer , 120–240 V, includes thermal label printer, USB cable, 1 roll of 500 labels
1450007	Thermal Printer Labels , 1 roll of 500 labels, for thermal label printer

* Compatible with TC20 and TC10 automated cell counters.

