VIEW RESULTS OCT 1, 2008 - 17:55:01 [100 of 100, NEWEST] ID: A456374 Total cell conc./ml 4.20 x 106 Live cell conc./ml 2.10 x 106 Live cells 50% SEP 2, 2008 - 11:25:45 [99 of 100] Total cell conc./ml 5.32 x of IQ/OQ system check 11:44:32

TC10™ Automated Cell Counter

- Cell counting
- Cell viability
- Analysis options

The Truly Automated Cell Counting Solution

Counting cells with a microscope and a hemocytometer is a tedious task with varying results. The TC10 cell counter is truly automated, providing a total count of mammalian cells and a live/dead ratio in one simple step with accurate, reproducible results. Speed up your cell counting and accelerate your research.

- **Fit cell counting into your schedule** — count cells quickly, accurately, and consistently within 30 sec using the built-in auto-focus
- **Configure results to your needs** — determine total cell count without dye or use trypan blue dye to assess total cell count and cell viability
- **Have results at your fingertips** — print count results and dilution calculations from the TC10 thermal label printer
- **Easily archive your results** — transfer counts and cell images using a USB key and access up to 100 counts stored in the onboard memory
- **Trust your counts** — confirm instrument functionality with the TC10 verification slide
- **Conserve precious cells** — use only 10 µl of suspended cells

One-Step Counting

Load the sample onto a slide.

Insert the slide into the TC10 cell counter; counting automatically begins.

Obtain a total cell count (without trypan blue dye) or total and live cell counts (with trypan blue dye) in 30 seconds.

BIO-RAD

Total Cell Count

Bio-Rad's TC10 automated cell counter utilizes microscopy with auto-focus and a sophisticated image analysis algorithm. The TC10 counter analyzes multiple focal planes, determines the best plane to measure total cell count against the background, and then counts cells based on physical properties such as size and shape. TC10 cell counting accuracy is comparable to results obtained with a hemocytometer for cells within the ranges of 5 x 10^4–1 x 10^7 cells/ml and 6–50 µm cell diameter.

Cell Viability

The TC10 counter auto-detects the presence of the trypan blue dye in the sample to assess cell viability via trypan blue dye exclusion by scoring cells across multiple focal planes.

Analysis Options

After viewing cell count results, users can choose to view an image of the counted cells on the TC10 counter. An annotated JPEG file of the cell image can be exported via the USB port for further analysis.

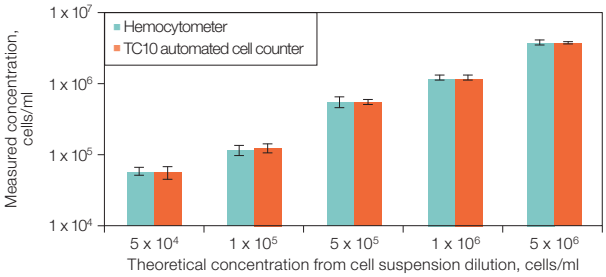
Users can access the onboard dilution calculator to determine the volume adjustments required to achieve the cell concentration needed for the next experiment.

A TC10 thermal label printer can print count results onto labels. These can be placed into a laboratory notebook as a record of the count.

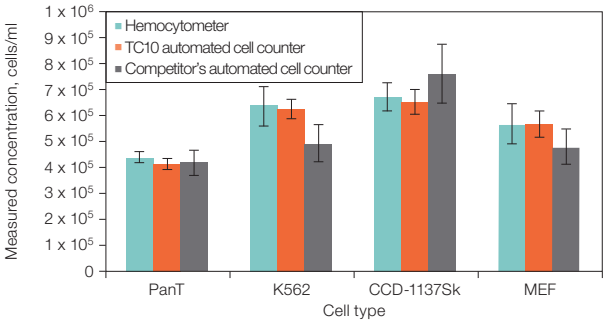
Results from 100 counts are stored in the TC10 cell counter so you can always go back and recover them. Previous count results can be exported via the USB port and opened in a Microsoft Excel spreadsheet, allowing easy comparison of data between experiments and traceability of the count results.

Specifications

Counting time	30 sec
Cell concentration range	5 x 10^4–1 x 10^7 cells/ml
Optimal cell concentration range	1 x 10^5–5 x 10^6 cells/ml
Cell diameter range	
Total count	6–50 µm
Live count	10–50 µm
Sample volume	10 µl
Data storage	100 counts
Data export	Via USB key
Dimensions (W x D x H)	19 x 15 x 25.4 cm (7.5 x 6 x 10")
Weight	2.2 kg (4.8 lb) (without the external power supply)



The TC10 cell counter demonstrates accurate cell counts across an extended range of cell concentrations. MEF cells were concentrated, serially diluted, and counted with a hemocytometer and a TC10 automated cell counter. The TC10 counter and hemocytometer cell counts showed no statistically significant differences. Precision is indicated by the standard deviations; error bars represent average standard deviations. Cell counts on the TC10 counter were performed on four different instruments with six sample replicates.



The TC10 cell counter demonstrates accurate cell counts across a range of cell sizes. Small (PanT), medium (K562), and large (CCD, MEF) cells were counted with a hemocytometer, a TC10 automated cell counter, and a competitor's automated cell counter. The TC10 counter and hemocytometer cell counts showed no statistically significant differences. Precision is indicated by the standard deviations; error bars represent average standard deviations. Cell counts on the TC10 counter were performed on four different instruments with six sample replicates.

Ordering Information

Catalog # Description

TC10 Automated Cell Counter

145-0001 **TC10 Automated Cell Counter**, 100–240 V, includes instrument, USB key, 30 TC10 dual-chamber counting slides (60 counts), 1.5 ml TC10 trypan blue dye

145-0009 **TC10 Automated Cell Counter with Printer**, 100–240 V, includes instrument, USB key, TC10 thermal label printer, 1 roll of 185 labels, 30 TC10 dual-chamber counting slides (60 counts), 1.5 ml TC10 trypan blue dye

Kits and Reagents

145-0003 **TC10 Counting Kit**, includes 30 TC10 dual-chamber counting slides (60 counts), 1.5 ml TC10 trypan blue dye

145-0014 **TC10 Verification Kit**, includes TC10 verification slide, protocol

Accessories

145-0005 **TC10 Thermal Label Printer**, includes label printer, USB cable, 1 roll of 185 labels

145-0007 **Thermal Printer Labels**, 1 roll of 185 labels, for TC10 thermal label printer

BIO-RAD

Bio-Rad Laboratories, Inc.

Life Science Group

Web site *www.bio-rad.com* ***USA*** *800 424 6723* ***Australia*** *61 2 9914 2800* ***Austria*** *01 877 89 01* ***Belgium*** *09 385 55 11* ***Brazil*** *55 31 3689 6600* ***Canada*** *905 364 3435* ***China*** *86 21 6169 8500* ***Czech Republic*** *420 241 430 532* ***Denmark*** *44 52 10 00* ***Finland*** *09 804 22 00* ***France*** *01 47 95 69 65* ***Germany*** *089 31 884 0* ***Greece*** *30 210 777 4396* ***Hong Kong*** *852 2789 3300* ***Hungary*** *36 1 459 6100* ***India*** *91 124 4029300* ***Israel*** *03 963 6050* ***Italy*** *39 02 216091* ***Japan*** *03 6361 7000* ***Korea*** *82 2 3473 4460* ***Malaysia*** *60 3 2117 5260* ***Mexico*** *52 555 488 7670* ***The Netherlands*** *0318 540666* ***New Zealand*** *64 9 415 2280* ***Norway*** *23 38 41 30* ***Poland*** *48 22 331 99 99* ***Portugal*** *351 21 472 7700* ***Russia*** *7 495 721 14 04* ***Singapore*** *65 6415 3170* ***South Africa*** *27 861 246 723* ***Spain*** *34 91 590 5200* ***Sweden*** *08 555 12700* ***Switzerland*** *061 717 95 55* ***Taiwan*** *886 2 2578 7189* ***Thailand*** *66 2 6518311* ***United Kingdom*** *020 8328 2000*