

Introducing Scepter™ 2.0 Cell Counter



Bringing you precision counting in an easy-to-use, portable format, the Scepter cell counter has revolutionized the way scientists are able to count cells and particles.

The new Scepter 2.0 cell counter marks the launch of the next generation in Scepter technology, highlighted by:

Compatibility with More Cell Types

The Scepter cell counter is the only one on the market to accurately count particles smaller than 6 µm in diameter.

Increased Cell Concentration Range

The new 40 µm sensor can count samples concentrated up to 1,500,000 cells/mL.

Powerful Software for Complex, Effortless Cell Analysis:

- Compare sample sets side by side using histogram overlay and multiparametric tables
- Save and create gating templates
- Generate reports, graphs and tables

What people are saying...

"At last, an alternative to lining up for the Coulter counter, and far easier than sweating over fragile hemocytometers."

AMY A. CAUDY is a Lewis-Sigler Fellow at Princeton University's Lewis-Sigler Institute for Integrative Genomics

The Scientist, Dec. 2010.
Top Ten Innovations of 2010.

"Cell counting is normally a very tedious process and usually only provides minimal information on the cell population. This instrument, which is only slightly larger than an automatic pipette, allows you to count cells in your tissue-culture hood, simplifies the procedure, and provides much useful data, such as the fraction of intact cells."

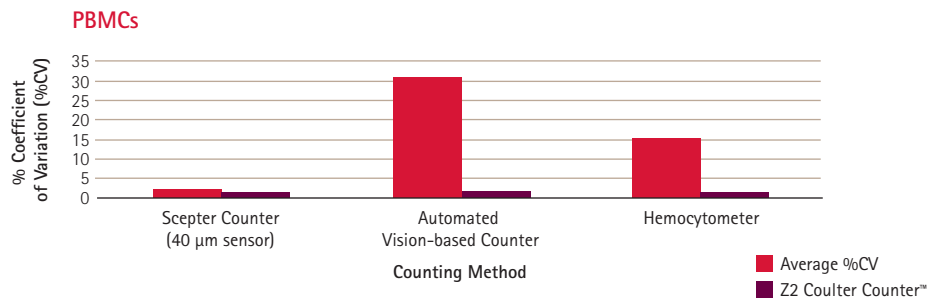
H. STEVEN WILEY is a lead biologist at the Environmental Molecular Sciences Laboratory at the Pacific Northwest National Laboratory

The Scientist, Dec. 2010.
Top Ten Innovations of 2010.

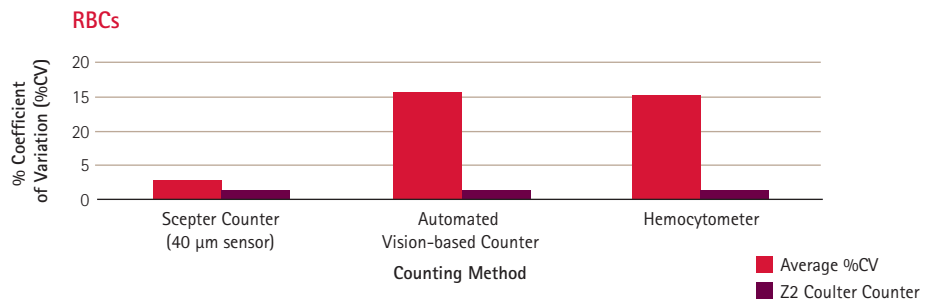
The Power of Precision

Trust Scepter counting with your most valuable samples to get repeatable and dependable counts. The accuracy of Scepter counting is particularly apparent with smaller cell types. Because the Scepter cell counter measures volume using the Coulter Principle, it can properly discriminate cells from debris and background unlike vision based techniques, which rely on object recognition software and cannot reliably detect small cells.

Count blood cells and other cells with small diameters with the highest precision. For counting peripheral blood mononuclear cells (PBMCs, 7 µm diameter) and red blood cells (RBCs, ~5.6 µm diameter), Scepter counting is more precise than other counting methods, including other commercially available automated vision-based benchtop cell counters and manual counting.



The Scepter 2.0 cell counter counts PBMCs with greater precision than other counting methods, as reflected by low coefficients of variation. %CVs were calculated using average cell counts of four replicate samples.



The Scepter 2.0 cell counter counts RBCs with greater precision than other counting methods, as reflected by low coefficients of variation. %CVs were calculated using average cell counts of four replicate samples.

Scepter Sensor Technology

	Measured size (µm)	40 µm	60 µm
NIH 3T3	15		■
454 beads			■
Algae (various)	7-9	■	
CHO	14-17		■
Cos-7	15		■
Epithelia	14-15		■
HEK293	11-15		■
HeLa	12-14		■
HepG2	12		■
HT-29	11		■
HUH7-Hepatoma line			■
B Cells	6-11	■	
Human ES Cells	9-12	■	
HUVEC	14-15		■
Jurkat	13		■
K562	22		■
Luminex® beads	5-6	■	
MCF7	15-17		■
MDCK	13-15		■

	Measured size (µm)	40 µm	60 µm
Mouse Embryonic Stem Cell	5-13	■	■
Mesenchymal Stem Cell	15-16		■
PBMCs	7-12	■	
PC12	9-13		■
Primary Astrocytes	7	■	
Primary Neuronal Cell		■	
Rat Whole Blood	4.6	■	
Rat Dorsal Root Ganglion Cells	7	■	
Red Blood Cells	5-7	■	
Rat Neural Stem Cell	11-13		■
SF9	13		■
SH-SY5Y	12		■
Splenocytes	7-9	■	
U266	12		■
U87-Human Glioblastoma cell line	12-14		■
Yeast- <i>Pichia Pastoris</i>	5	■	
Yeast- <i>S.cerevisiae</i>	6	■	

Now compatible with 60 µm and 40 µm sensors, the Scepter 2.0 Cell Counter can meet even more of your cell and particle counting needs. Use the 60 µm sensor for particles between 6 and 36 µm. Use the 40 µm sensor for particles between 3 and 17 µm. The table (left) lists just some of the cell types validated with the Scepter cell counter and the recommended Scepter sensor.

■ Recommended based on size ■ EMD Millipore Validated ■ Customer Validated

Intuitive New Analysis Software

From simple counts to complex volume measurements used to assess cell health parameters, Scepter Software Pro provides an intuitive, intelligent platform to perform high-level cell analysis based on the size measurements captured with the Scepter cell counter.

Using the Scepter Software Pro on your computer, you can:

- Compare several samples and data sets side by side using histogram overlay and multiparametric tables
- Save and create gating methods to be used from one experiment to the next
- Create attractive graphical presentations and reports with your data



A VIEW OF SCEPTER SOFTWARE PRO

The screenshot shows the Scepter Application version 2.0 beta2 interface. It features a 'Data' list on the left, an 'Analysis Template' section, and two plots: 'Current Plot' and 'Multifunction Plot'. A 'Group Stats' window is open on the right, displaying a table of statistics. At the bottom, there are buttons for 'Setup', 'Export To CSV', and 'Print Stats'.

DATA: data files from your Scepter cell counter

CURRENT PLOT: working plot and data file

GROUP STATS: customizable statistics from your selected data files

MULTIFUNCTIONAL PLOT: multiple data sets/histogram overlays

REPORTS: export, print selected graphs/files, cut and paste

ANALYSIS TEMPLATES: saved gating parameters

File Name	Dilution Factor	Original Volume (mL)	Original Inc. (count/mL)
Copy_SN A70	10.00	1.00	3.87e+05
Copy_SN A70	1.00	10.00	3.87e+05
Copy_SN A70	10.00	10.00	3.87e+05
Copy_SN A70	1.00	1.00	3.87e+05
Copy_SN A70	1.00	1.00	3.44e+05
Copy_SN A70	1.00	1.00	2.72e+05
Copy_SN A70	1.00	1.00	2.68e+05
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	9.76e+04
SN A700afg3	1.00	1.00	3.91e+05
SN A700afg3	1.00	1.00	3.91e+05
SN A700afg3	1.00	1.00	3.91e+05

Ordering Information

Description	Quantity	Catalog No.
Scepter 2.0 Handheld Automated Cell Counter		
with 40 µm Scepter Sensors (50 Pack)	1	PHCC20040
with 60 µm Scepter Sensors (50 Pack)	1	PHCC20060
Includes:		
Scepter Cell Counter	1	
Downloadable Scepter Software	1	
O-Rings	2	
Scepter Test Beads	1	PHCCBEADS
Scepter USB Cable	1	PHCCCABLE
Scepter Sensors, 60 µm	50	PHCC60050
	500	PHCC60500
Scepter Sensors, 40 µm	50	PHCC40050
	500	PHCC40500
Universal Power Adapter	1	PHCCPOWER
Scepter O-Ring Kit, includes 2 O-rings and 1 filter cover	1	PHCCOCLIP

Are you an existing Scepter user interested in upgrading your device to Scepter 2.0?

It's easy.

Visit www.millipore.com/scepterupgrade to upgrade your Scepter today!



For technical assistance, contact Millipore:
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E-mail: tech_service@millipore.com
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