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.

Merck Millipore is a division of **MERCK**

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.
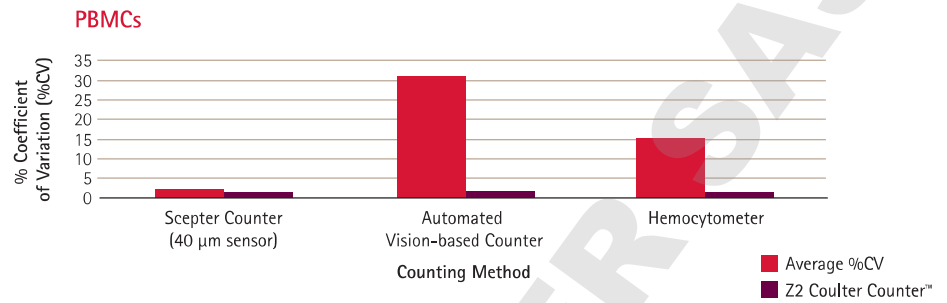
PBMCs

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.
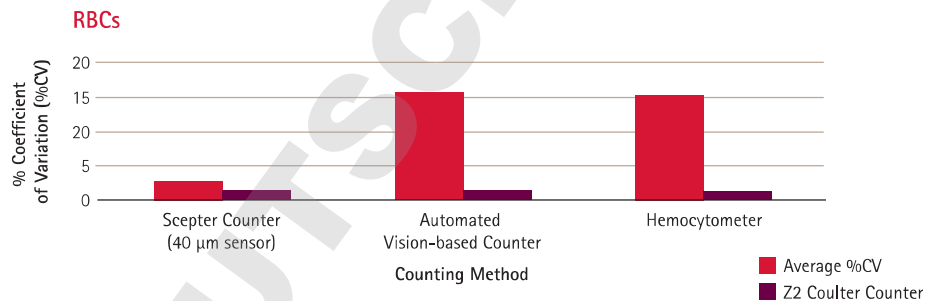
RBCs

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		Measured size (µm)	40 µm	60 µm
NIH 3T3	15		■	Mouse Embryonic Stem Cell	5–13	■	■
454 beads			■	Mesenchymal Stem Cell	15–16		■
Algae (various)	7–9	■		PBMCs	7–12	■	
CHO	14–17		■	PC12	9–13		■
Cos-7	15		■	Primary Astrocytes	7	■	
Epithelia	14–15		■	Primary Neuronal Cell		■	
HEK293	11–15		■	Rat Whole Blood	4.6	■	
HeLa	12–14		■	Rat Dorsal Root Ganglion Cells	7	■	
HepG2	12		■	Red Blood Cells	5–7	■	
HT-29	11		■	Rat Neural Stem Cell	11–13		■
HUH7-Hepatoma line			■	SF9	13		■
B Cells	6–11	■		SH-SY5Y	12		■
Human ES Cells	9–12	■		Splenocytes	7–9	■	
HUVEC	14–15		■	U266	12		■
Jurkat	13		■	U87-Human Glioblastoma cell line	12–14		■
K562	22		■	Yeast- *Pichia Pastoris*	5	■	
Luminex® beads	5–6	■		Yeast- *S.cerevisiae*	6	■	
MCF7	15–17		■				
MDCK	13–15		■				

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

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.

# 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
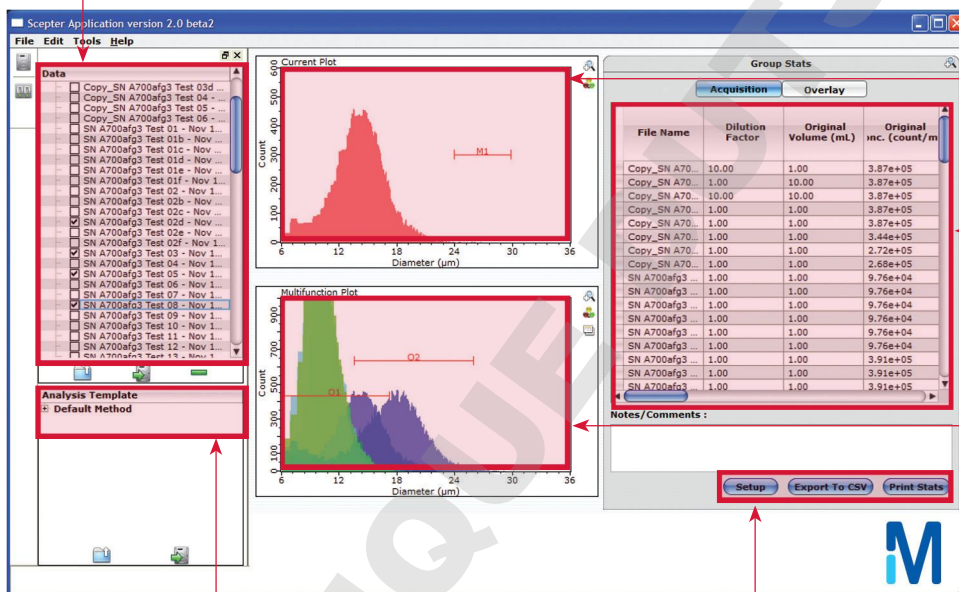
DATA: data files from your Scepter cell counter

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

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!

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