



# autoMACS™ Separator

**Cell sorting at more than  
10 million cells per second**



# autoMACS™ Separator – the universal tool in cell sorting

The autoMACS™ Separator is a bench-top instrument for high-speed automated cell sorting. Employing the MACS® Technology, the autoMACS Separator is designed for positive selection as well as depletion of magnetically labeled cells.

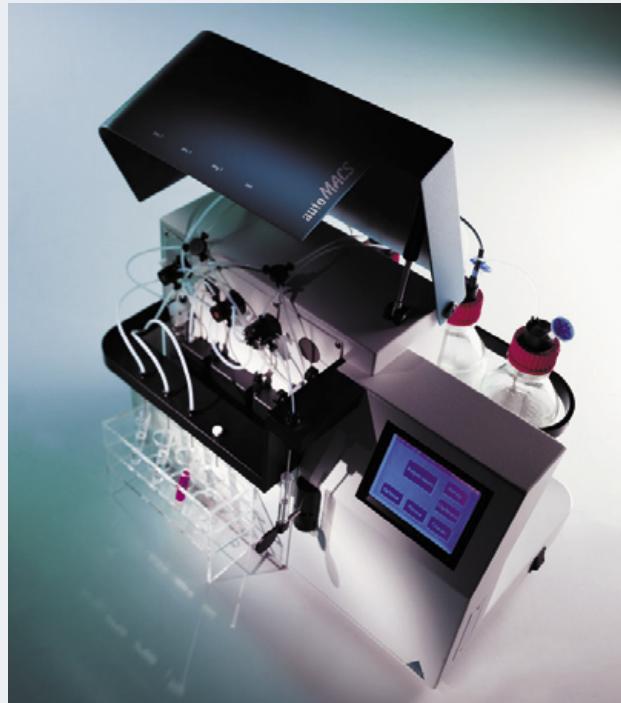
Using the autoMACS Separator is simple: Add the magnetic labeling reagent to a cell suspension and choose an application program from the autoMACS Touchscreen. In just a few minutes,

cells are magnetically separated and ready for cell analysis or further cell sorting. With the autoMACS Separator, rare cells can be enriched up to 10,000-fold, or unwanted cells are depleted up to 99%.

MACS magnetic cell sorting does not alter the flow cytometric or functional properties of cells. For specific magnetic labeling a wide range of MACS MicroBeads and MACS Antibodies is available.

## The autoMACS™ Separator ...

- is a bench-top magnetic cell sorter developed for the special needs of high-throughput laboratories,
- uses proven MACS® Technology well-known for gentle cell sorting and superior performance,
- ensures reliable and gentle high-speed cell sorting of up  $4 \times 10^9$  cells in about 5 minutes,
- is operated with preset separation programs and automated system cleaning,
- is compatible with any MACS® Cell Separation product for the isolation of virtually any cell type,
- enables cell sorting of leukocyte subsets also directly from whole blood, and
- allows pre-sorting of e.g. fluorochrome-labeled target cells before flow cytometric cell sorting.



Programs	9 preset
Protocol	single or double enrichment
Speed (1 mL)	$10^7$ cells/sec
Program duration (1 mL)	2.0–15 min*
Column capacity	$2 \times 10^8$ labeled cells
Input volume	0.25 mL–50 mL
Output volume	0.5 mL–50 mL
Size	500 x 370 x 370 mm
Weight	21 kg
Input voltage	100–250 V AC 50–60 Hz
Power consumption	50 VA

\* dependent on the separation program chosen.

... for standardization in sample processing

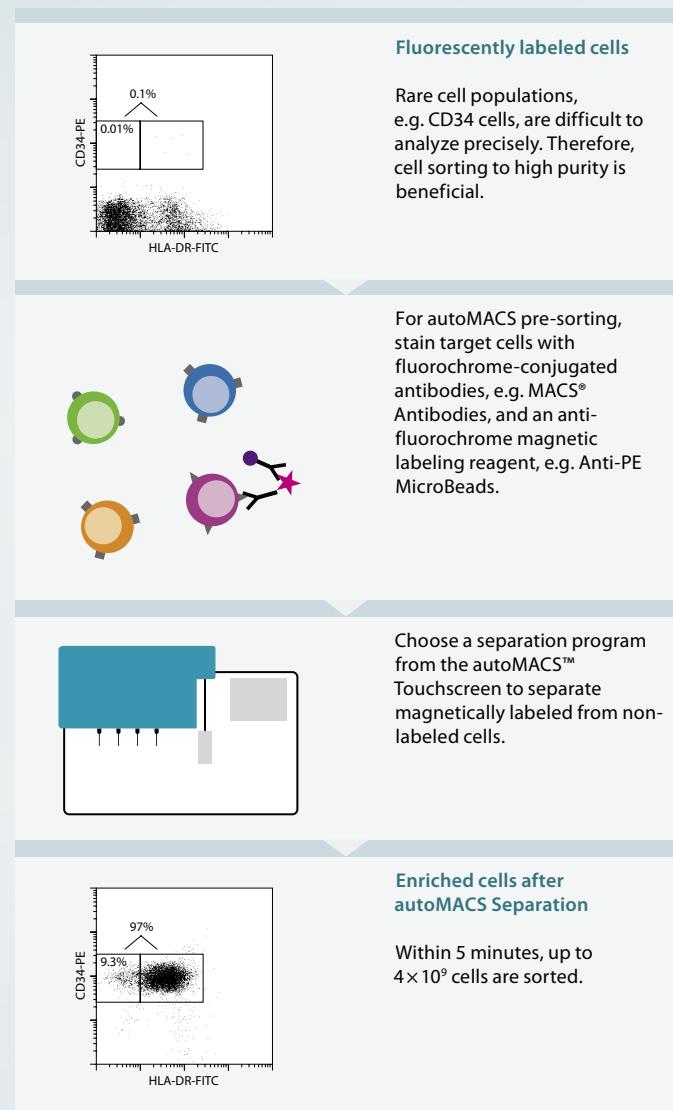
# autoMACS™ Separator – the magnetic pre-sorter for fluorochrome-stained cells

Enhanced sensitivity towards rare cells can be rapidly achieved by autoMACS pre-sorting, e.g. for subsequent cell analysis or further flow cytometric cell sorting.

If subsequent flow cytometric cell sorting is desired, label your cells fluorescently and choose from a variety of Anti-Fluorochrome MicroBeads for simultaneous fluorescent and magnetic labeling. Pre-sort your cells with the autoMACS™ Separator, and then go straight to the flow sorter.

Alternatively, pre-sort your cells with any other MACS® MicroBeads and stain cells before or after magnetic separation by using MACS Antibodies.

- For a more accurate analysis of rare cells
- For fast processing of large cell numbers without time-consuming sorting sessions
- For easy multi-parameter sorting to highest purity and yield



## Fluorescently labeled cells

Rare cell populations, e.g. CD34 cells, are difficult to analyze precisely. Therefore, cell sorting to high purity is beneficial.

For autoMACS pre-sorting, stain target cells with fluorochrome-conjugated antibodies, e.g. MACS® Antibodies, and an anti-fluorochrome magnetic labeling reagent, e.g. Anti-PE MicroBeads.

Choose a separation program from the autoMACS™ Touchscreen to separate magnetically labeled from non-labeled cells.

## Enriched cells after autoMACS Separation

Within 5 minutes, up to  $4 \times 10^9$  cells are sorted.

# MACS® Products

## autoMACS™ Hardware

autoMACS™ Starting Kit	# 201-01
autoMACS™ Separation Columns	# 130-021-101

## autoMACS™ Accessories

Laminar Hood Set	# 130-090-333
Bottle Extension Set	# 130-090-334
Air Filter Extension Set	# 130-091-339

## MACS® Separation Buffers

autoMACS™ Running Buffer	# 130-091-221
autoMACS™ Rinsing Solution	# 130-091-222
MACS® BSA Stock Solution	# 130-091-376

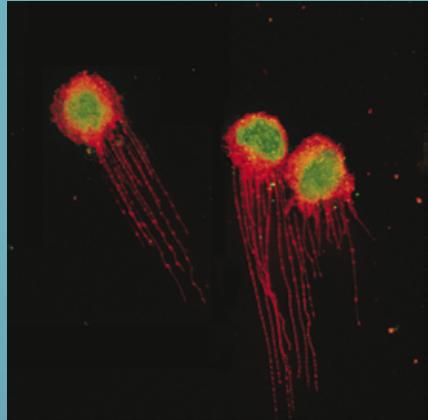
## autoMACS™ Service

autoMACS™ Service Contract contact your local representative



## MACS® Antibodies

A wide panel of antibodies, e.g. for fluorescent staining of human, non-human primate, and mouse cells, is now available. For detailed information on MACS® Antibodies please visit [www.miltenyibiotec.com](http://www.miltenyibiotec.com).



## MACS® Anti-Fluorochrome MicroBeads

Anti-FITC MicroBeads	# 130-048-701
Anti-FITC MultiSort Kit	# 130-058-701
Anti-PE MicroBeads	# 130-048-801
Anti-PE MultiSort Kit	# 130-090-757
Anti-APC MicroBeads	# 130-090-855
Anti-APC MultiSort Kit	# 130-091-255
Anti-Cy5/Anti-Alexa Fluor 647 MicroBeads	# 130-091-395
Anti-Cy7 MicroBeads	# 130-091-652

Plasmacytoid blood dendritic cells isolated from PBMCs by using the CD304 (BDCA-4/Neuropilin-1) MicroBead Kit. Cells were stained with CD303 (BDCA-2) and anti-HLA-DR antibodies.

Unless otherwise specifically indicated, Miltenyi Biotec products and services are for research use only and not for therapeutic or diagnostic use.

## Miltenyi Biotec

**Miltenyi Biotec GmbH**  
Friedrich-Ebert-Straße 68  
51429 Bergisch Gladbach  
Germany  
Phone +49 2204 8306-0  
Fax +49 2204 85197  
macs@miltenyibiotec.de

[www.miltenyibiotec.com](http://www.miltenyibiotec.com)

**Miltenyi Biotec Inc.**  
12740 Earhart Avenue  
Auburn CA 95602, USA  
Phone 800 FOR MACS,  
+1 530 888 8871  
Fax +1 530 888 8925  
macs@miltenyibiotec.com

**Miltenyi Biotec Pty. Ltd. (Australia)**  
Phone +61 02 8877 7400  
macs@miltenyibiotec.com.au

**Miltenyi Biotec B. V. (Benelux)**  
macs@miltenyibiotec.nl  
Customer service, Netherlands  
Phone 0800 4020120  
Customer service, Belgium  
Phone 0800 94016  
Customer service, Luxembourg  
Phone 800 24971  
**Miltenyi Biotec Shanghai Office**  
Phone +86 21 6235 1005  
macs@miltenyibiotec.com.cn

**Miltenyi Biotec (France)**  
Phone +33 1 56 98 16 16  
macs@miltenyibiotec.fr  
**Miltenyi Biotec S.r.l. (Italy)**  
Phone +39 051 646 0411  
macs@miltenyibiotec.it  
**Miltenyi Biotec K.K. (Japan)**  
Phone +81 3 56 46 8910  
macs@miltenyibiotec.jp

**Miltenyi Biotec Asia Pacific Pte. Ltd. (Singapore)**  
Phone +65 6238 8183  
macs@miltenyibiotec.com.sg  
**Miltenyi Biotec S.L. (Spain)**  
Phone +34 91 512 12 90  
macs@miltenyibiotec.es  
**Miltenyi Biotec Ltd. (UK)**  
Phone +44 1483 799 800  
macs@miltenyibiotec.co.uk

