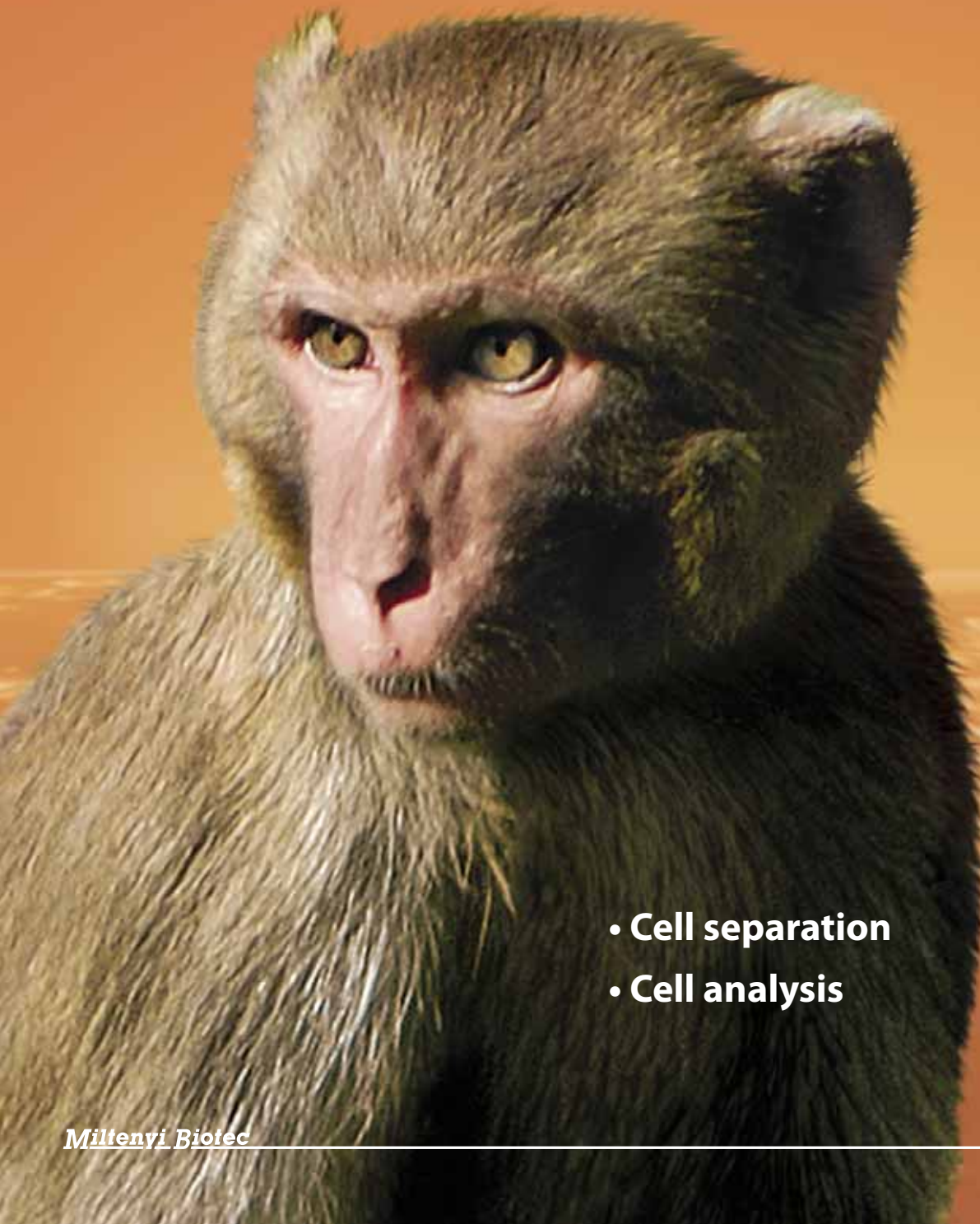




Products for non-human primate cell research



- Cell separation
- Cell analysis

MACS® Technology for gentle cell isolation

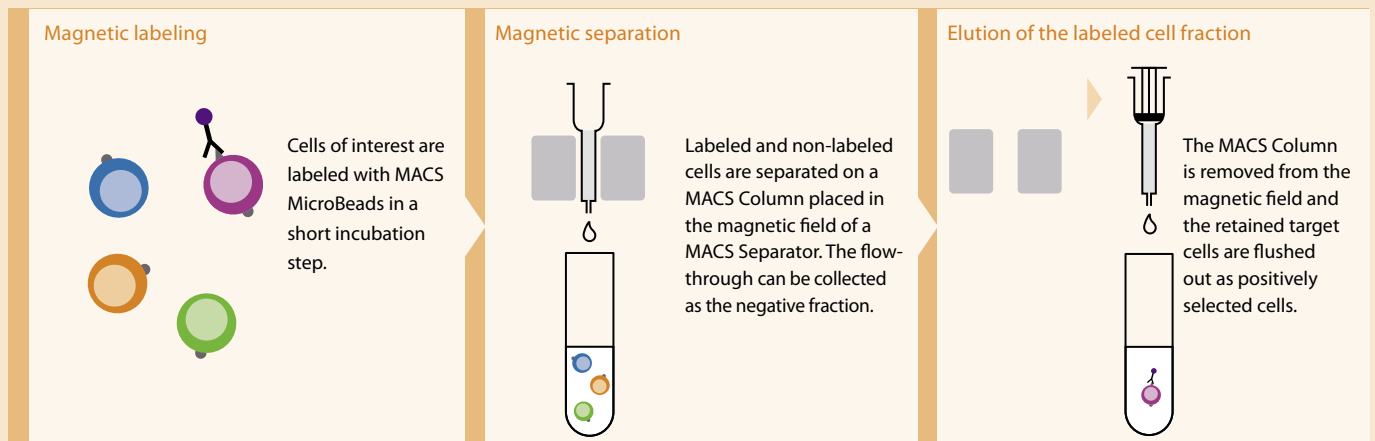
MACS® Technology, the well-established method for human and rodent cell isolation, is also available for the isolation of cells from non-human primate samples. The column-based MACS Technology is convenient to handle and results in optimal recovery and best purity of the target cells.

MACS MicroBeads and kits for non-human primate cells were developed to achieve excellent separation of cells from **rhesus monkey (*Macaca mulatta*)**. *Macaca mulatta* serves as a very important animal model in non-human primate research. The antibodies in the cell separation reagents are also cross-reactive

with **cynomolgus monkey (*Macaca fascicularis*)**. For the latest information about cross-reactivity testing with other non-human primate cells, please consult our website www.miltenyibiotec.com.

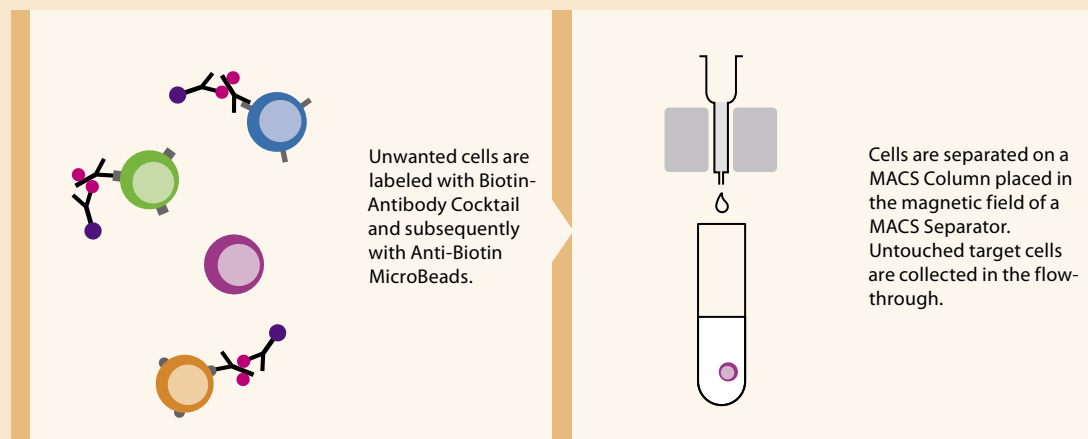
Positive selection of non-human primate cells

Highly specific labeling of target cells with MACS MicroBeads or MicroBead Kits permits fast and positive selection resulting in high purity and excellent recovery.



MACS® Cell Isolation Kits for untouched isolation of non-human primate T cells

The method of isolating untouched T cells by magnetic removal of non-T cells is a perfect option, if isolated cells are to be separated according to a second marker, or if antibody binding to target cells is not desired.



MACS® Benefits

MACS® Technology

- excellent purity and recovery
- easy separation of large cell numbers or of rare cells
- fast, easy to perform, and absolutely reliable
- gentle to cells
- manual or automated cell separation
- compatible with flow cytometry

MACS® MicroBeads

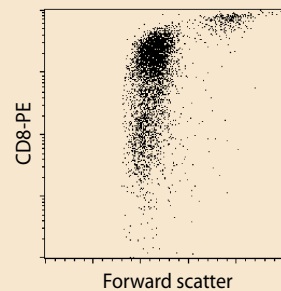
- highly specific monoclonal antibody conjugates
- colloidal, for easy handling and short incubation times (15 minutes)
- small (~ 50 nm), non-toxic, biodegradable
- so small that detaching is not required for downstream experiments

MACS® Products for the separation of non-human primate cells

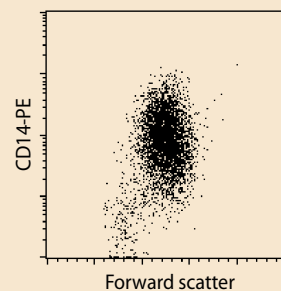
T cells	
CD2 MicroBeads*	# 130-091-113
CD3 MicroBead Kit	# 130-092-012
Pan T Cell Isolation Kit	# 130-091-993
CD4 MicroBeads	# 130-091-102
CD4 ⁺ T Cell Isolation Kit	# 130-092-144
CD8 MicroBead Kit*	# 130-091-112
CD8 ⁺ T Cell Isolation Kit	# 130-092-143
CD25 MicroBeads**	# 130-091-095
NK cells	
CD16 MicroBeads***	# 130-091-145
B cells	
CD20 MicroBeads	# 130-091-105
Monocytes	
CD11b MicroBeads****	# 130-091-100
CD14 MicroBeads	# 130-091-097
CD56 MicroBeads	# 130-091-094
Dendritic cells	
CD1c (BDCA-1) ⁺ Dendritic Cell Isolation Kit	# 130-091-878
Leukocytes	
CD45 MicroBeads	# 130-091-899
CD45RA MicroBeads	# 130-091-092

- * antigen is also expressed on a subset of rhesus monkey NK cells
- ** antigen is also expressed on rhesus monkey B cells
- *** antigen is also expressed on a subset of rhesus monkey monocytes
- **** antigen is also expressed on rhesus monkey granulocytes

MACS Separation of rhesus monkey CD8⁺ cells



Rhesus monkey monocyte isolation with CD14 MicroBeads



Antigen-presenting cells

T cells

CD2 MicroBeads #130-091-113
 CD3 MicroBead Kit #130-092-012
 Pan T Cell Isolation Kit #130-091-993

Monocytes/ Macrophages



Dendritic cells



B cells



Th cells



Tc cells



TREG cells



NK cells



Leukocytes

CD45 MicroBeads
#130-091-899
 CD45RA MicroBeads
#130-091-092

CD11b MicroBeads
#130-091-100
 CD14 MicroBeads
#130-091-097
 CD56 MicroBeads
#130-091-094

CD1c (BDCA-1)⁺
Dendritic Cell Isolation Kit
#130-091-878

CD20 MicroBeads
#130-091-105

CD4 MicroBeads
#130-091-102
 CD4⁺ T Cell
Isolation Kit
#130-092-144

CD8 MicroBead
Kit
#130-091-112
 CD8⁺ T Cell
Isolation Kit
#130-092-143

Combination of:
 CD4⁺ T Cell
Isolation Kit
#130-092-144 and
 CD25 MicroBeads
#130-091-095

Combination of:
 CD14 MicroBeads
#130-091-097 and
 CD16 MicroBeads
#130-091-145

- positive selection (labeling of wanted cells)
- depletion (labeling of unwanted cells)
- isolation of untouched cells using a depletion cocktail

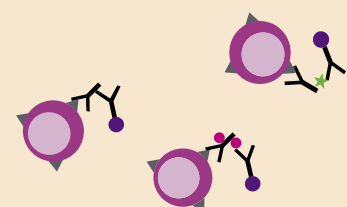
Indirect MicroBeads for MACS® Separation with your own antibodies

For maximum flexibility, indirect magnetic labeling with MACS Indirect MicroBeads allows you to use your own or other commercially available primary antibodies

for the isolation of specific target cells. Your monoclonal or polyclonal primary antibodies can be either unconjugated, biotinylated or fluorochrome-

conjugated—just select the most suitable MACS Indirect MicroBeads for your experimental needs.

MACS Product	Target
Anti-Fluorochrome MicroBeads	FITC, PE, APC, Cy5/Alexa Fluor 647, Cy7
Anti-Fluorochrome MultiSort Kit	FITC, PE, APC
Anti-Biotin MicroBeads or MultiSort Kit	Biotinylated antibodies
Streptavidin MicroBeads	Biotinylated antibodies
Anti-Immunoglobulin MicroBeads	Monoclonal and polyclonal antibodies



MACS® Cell Analysis

A panel of specific fluorochrome-conjugated, biotinylated, or pure antibodies is available for flow cytometry, fluorescence microscopy, and immunohistochemistry. The reactivity of the antibodies with cells of different non-human primate species is listed below. Information on cross-reactivity with other non-human primate

species is constantly updated and available at www.miltenyibiotec.com.

MACS Antibodies are optimized for the evaluation of MACS Separations (MACS control). The convenient format and protocol allows staining of cells before or after the magnetic cell separation.

Applications:

- Identification and enumeration of cells
- Analysis of cell fractions separated by MACS Technology
- Fluorescence signal amplification
- Detection of cells according to intracellular antigens
- Fixation and dead cell discrimination

MACS® Antibodies for identification and analysis of non-human primate cells

MACS Antibody	Species and reactivity			Product format
	R	C	P	
CD1c (BDCA-1)	×	×	×	FITC, PE, APC, Biotin, pure
CD2*	×	×	•	PE
CD3	×	×	×	PE, APC, Biotin
CD4	×	×	•	FITC, PE, APC
CD6	×	×	•	FITC, PE, APC
CD8	×	×	•	FITC, PE, APC
CD11b	×	×	•	FITC, PE, APC
CD14**	×	×	×	FITC, PE, APC
CD16	×	×	•	FITC, PE, APC
CD20	×	×	•	FITC, PE
CD25	×	×	•	PE, Biotin
CD45	×	×	×	FITC, PE, APC, Biotin
CD56	×	×	•	PE, APC, pure
MACS Antibody for intracellular staining				
Anti-IFN-γ	×	•	•	FITC, PE, APC
Anti-IL-2	×	•	•	PE, APC
Anti-IL-4	×	×	•	PE
Anti-IL-5	×	×	•	PE, APC
Anti-IL-10	×	×	•	PE, APC

R: Rhesus monkey
(*Macaca mulatta*)

C: Cynomolgus monkey
(*Macaca fascicularis*)

P: Pigtail monkey
(*Macaca nemestrina*)

× reactive
• not tested

* Antibody clone is also reported to cross-react with chimpanzee and squirrel monkey [Ozwaro, *et al.* (1997) *J. Med. Primatol.* 26: 164–171].

** Antibody clone is also reported to cross-react with cotton top tamarin [Wilson, *et al.* (1995) *J. Immunol. Meth.* 178: 195–200].

Indirect labeling



Anti-Biotin

FITC #130-090-857
PE #130-090-756
APC #130-090-856

Fluorescence signal amplification



FASER Kit

FITC #130-091-763
PE #130-091-764
APC #130-091-762

Intracellular staining



Inside Stain Kit

#130-090-477

Dead cell staining



Fixation and Dead Cell Discrimination Kit

#130-091-163

For further information please contact your local Miltenyi Biotec office or distributor or visit our website www.miltenyibiotec.com

Miltenyi Biotec

Unless otherwise indicated, all products are for research use only and not for diagnostic or therapeutic use.



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