

## Contents

1. Description
  - 1.1 Important safety information
  - 1.2 Background information
  - 1.3 Applications
2. Technical specifications
3. Instructions for use

## 1. Description

This product is for research use only.

<b>Components</b>	MiniMACS Separator (# 130-042-102) or MiniMACS Starting Kit (# 130-090-312) MiniMACS Separator (# 130-042-102) MACS® MultiStand (# 130-042-303) MS Columns (# 130-042-201) One unit of MACS MicroBeads, or one MACS MicroBead Kit, or one MACS Cell Isolation Kit
<b>Storage</b>	Store separators dry at 15–35 °C and columns dry at 10–35 °C. Do not store separators and MACS MultiStand under a corrosive atmosphere, for example, in a chemical hood. Store MACS Cell Separation Reagents protected from light at 2–8 °C. Do not freeze. The expiration date is indicated on the label.
<b>Maintenance</b>	MACS Separators and MACS Columns are sensitive to heat and aggressive solvents, such as acetone. Do not autoclave MACS Separators or the MACS MultiStand. MACS Separators and the MACS MultiStand can be cleaned with a soft cleansing tissue and a mild detergent, and disinfected using 70% ethanol. Do not drop MACS Separators. Do not use if damage is visible.

## 1.1. Important safety information

### Magnetic field hazards



**STRONG MAGNETIC FIELD**



**WARNING**

**Strong magnetic fields can influence the functioning of pacemakers or electronic medical implants.**



- If wearing pacemakers or electronic medical implants keep a distance of at least 30 cm.



**CAUTION**

**Magnetizable objects can suddenly move towards the magnet.**

- Keep all magnetizable objects at a distance of at least 30 cm.

**NOTICE**

**The MiniMACS Separator has a powerful magnet.**

Strong magnetic fields can damage equipment susceptible for magnetic fields.

- Keep all magnetic storage devices, electronic equipment, and magnetizable objects at a distance of at least 30 cm.

## 1.2 Background information

The MACS Separation system is developed to separate human and animal cells. Moreover it can be used for the separation of plant protoplasts, bacteria, cell organelles, and other bioparticles. The material to be separated, for example, cells, is first magnetically labeled with superparamagnetic MACS MicroBeads. After magnetic labeling, cells are passed through a MACS Column which is placed in the strong permanent magnet of the MACS Separator. The ferromagnetic spheres in the column amplify the magnetic field by 10,000-fold, thus inducing a high gradient. Unlabeled cells pass through while magnetically labeled cell are retained within the column. After removal of the column from the magnetic field, the retained fraction can be eluted. Both fractions, labeled and non labeled, are completely recovered.

### 1.3 Applications

The MiniMACS Separator allows the performance of separations in combination with MS Columns (# 130-042-201), Large Cell Columns (# 130-042-202), and M Columns (# 130-042-801):

- MS Columns for positive selection and depletion of cells
- Large Cell Columns for positive selection of large cell, e.g., megakaryocytes
- M Columns for isolation of molecules, e.g., RNA

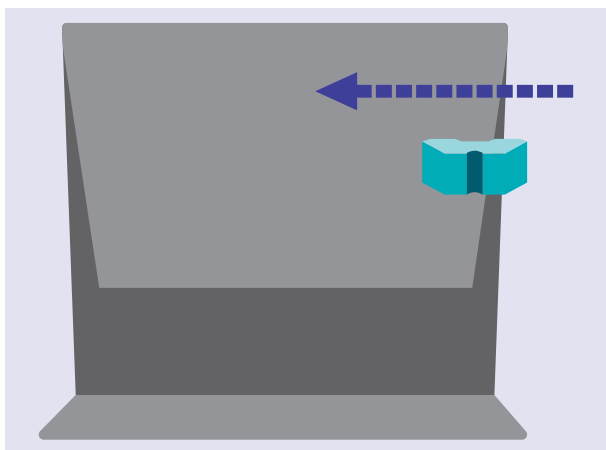
For details, refer to the respective MACS Column data sheets.

## 2. Technical specifications

- Weight of the MiniMACS Separator: 80 g
- Size of the MultiStand: 240×205×210 mm (W×D×H)
- Weight of the MultiStand: 2.15 kg

## 3. Instructions for use

1. Attach the MiniMACS Separator to the MACS MultiStand. Place the separator adjacent to the MACS MultiStand and gently slide it on the MACS MultiStand until the magnet is aligned correctly.



2. Place the column with the column wings to the front into the magnetic field of the MiniMACS Separator.
3. Proceed to cell separation. For details, please refer to the MACS Column and Cell Separation Reagent data sheets, respectively.

Refer to [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for local Miltenyi Biotec Technical Support contact information.

## Legal notices

### Limited product warranty

Miltenyi Biotec B.V. & Co. KG and/or its affiliate(s) warrant this product to be free from material defects in workmanship and materials and to conform substantially with Miltenyi Biotec's published specifications for the product at the time of order, under normal use and conditions in accordance with its applicable documentation, for a period beginning on the date of delivery of the product by Miltenyi Biotec or its authorized distributor and ending on the expiration date of the product's applicable shelf life stated on the product label, packaging or documentation (as applicable) or, in the absence thereof, ONE (1) YEAR from date of delivery ("Product Warranty"). Miltenyi Biotec's Product Warranty is provided subject to the warranty terms as set forth in Miltenyi Biotec's General Terms and Conditions for the Sale of Products and Services available on Miltenyi Biotec's website at [www.miltenyibiotec.com](http://www.miltenyibiotec.com), as in effect at the time of order ("Product Warranty"). Additional terms may apply. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING IF A PRODUCT IS SUITABLE FOR CUSTOMER'S PARTICULAR PURPOSE AND APPLICATION METHODS.

### Technical information

The technical information, data, protocols, and other statements provided by Miltenyi Biotec in this document are based on information, tests, or experience which Miltenyi Biotec believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. Miltenyi Biotec shall not be liable for any technical or editorial errors or omissions contained herein.

All information and specifications are subject to change without prior notice. Please contact Miltenyi Biotec Technical Support or visit [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for the most up-to-date information on Miltenyi Biotec products.

### Licenses

This product and/or its use may be covered by one or more pending or issued patents and/or may have certain limitations. Certain uses may be excluded by separate terms and conditions. Please contact your local Miltenyi Biotec representative or visit Miltenyi Biotec's website at [www.miltenyibiotec.com](http://www.miltenyibiotec.com) for more information.

The purchase of this product conveys to the customer the non-transferable right to use the purchased amount of the product in research conducted by the customer (whether the customer is an academic or for-profit entity). This product may not be further sold. Additional terms and conditions (including the terms of a Limited Use Label License) may apply.

CUSTOMER'S USE OF THIS PRODUCT MAY REQUIRE ADDITIONAL LICENSES DEPENDING ON THE SPECIFIC APPLICATION. THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING FOR ITSELF WHETHER IT HAS ALL APPROPRIATE LICENSES IN PLACE. Miltenyi Biotec provides no warranty that customer's use of this product does not and will not infringe intellectual property rights owned by a third party. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

### Trademarks

MACS, the Miltenyi Biotec logo, and MiniMACS are registered trademarks or trademarks of Miltenyi Biotec and/or its affiliates in various countries worldwide.

Copyright © 2021 Miltenyi Biotec and/or its affiliates. All rights reserved.