

#### Contents

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

# 1. Description

# Components MidiMACS<sup>™</sup> Starting Kit (LS) (# 130-042-301)

MidiMACS<sup>®</sup> Separator (# 130-042-302) MultiStand (# 130-042-303) LS Columns (# 130-042-401) One unit of MACS<sup>®</sup> MicroBeads, or one MACS

MicroBead Kit, or one MACS Cell Isolation Kit

#### MidiMACS Starting Kit (LD) (# 130-090-329)

MidiMACS Separator (# 130-042-302)

MultiStand (# 130-042-303)

LD Columns (# 130-042-901)

One unit of MACS MicroBeads, or one MACS MicroBead Kit, or one MACS Cell Isolation Kit

- Storage Store MACS Cell Separation Reagents protected from light at 2–8 °C. Do not freeze. The expiration date is indicated on the label. Store separators and columns dry at 15–35 °C. Do not store separators and MultiStand under a corrosive atmosphere, for example, in a chemical hood.
- Maintenance MACS Separators and MACS Columns are sensitive to aggressive media, for example, acetone and heat. Do not autoclave MACS Separators or the MultiStand. MACS Separators and the MultiStand can be cleaned with a soft cleansing tissue and a mild detergent, and disinfected using 70% ethanol. Do not drop MACS Separators.

▲ The MidiMACS Separator is equipped with an extremely powerful magnet. Its magnetic field can damage computers, watches, electronic storage media, and other objects sensitive to magnetic fields. Never allow the MidiMACS Separator to be closer than 30 cm to any magnetically sensitive object.

# MidiMACS<sup>™</sup> Starting Kits

MidiMACS™ Starting Kit (LS)	130-042-301
MidiMACS Starting Kit (LD)	130-090-329

### 1.1 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.

### 1.2 Applications

The MidiMACS Separator allows the performance of cell separations in combination with LS Columns (# 130-042-401), LD Columns (# 130-042-901), or Whole Blood Columns (# 130-093-545):

- LS Columns for positive selection or depletion
- LD Columns for depletion
- Whole Blood Columns for positive selection of cells directly from whole blood

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

# 2. Technical specifications

- Weight of the MidiMACS Separator: 300 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 MidiMACS Separator to the MultiStand.
- 2. Check that the ejection block in the gap of the magnet is attached before placing the MACS Column into the magnetic field of the MidiMACS Separator. Do not remove ejection block of the MidiMACS Separator.



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Miltenyi Biotec Inc. 2303 Lindbergh Street, Auburn, CA 95602, USA Phone 800 FOR MACS, +1 530 888 8871, Fax +1 530 888 8925 macs@miltenyibiotec.com 3. Place the column with the column wings to the front into the magnetic field of the MidiMACS Separator.



Figure 1: Assembled MidiMACS Separator.

4. Proceed to cell separation. For details, please refer to the MACS Column and Cell Separation Reagent data sheets, respectively.

All protocols and data sheets are available at www.miltenyibiotec.com.

#### Warnings

Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, which is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive conditions may develop.

#### Warranty

The products sold hereunder are warranted only to be free from defects in workmanship and material at the time of delivery to the customer. Miltenyi Biotec GmbH makes no warranty or representation, either expressed or implied, with respect to the fitness of a product for a particular purpose. There are no warranties, expressed or implied, which extend beyond the technical specifications of the products. Miltenyi Biotec GmbH's liability is limited to either replacement of the products or refund of the purchase price. Miltenyi Biotec GmbH is not liable for any property damage, personal injury or economic loss caused by the product.

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