

MidiMACS Separator	130-042-302
MidiMACS Starting Kit (LS)	130-042-301
MidiMACS Starting Kit (LD)	130-090-329

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## 1. Description

This product is for research use only.

<b>Components</b>	<p><b>MidiMACS Separator (# 130-042-302)</b> or <b>MidiMACS Starting Kit (LS) (# 130-042-301)</b> MidiMACS Separator (# 130-042-302) MACS® MultiStand (# 130-042-303) LS Columns (# 130-042-401) One unit of MACS MicroBeads, or one MACS MicroBead Kit, or one MACS Cell Isolation Kit</p> <p>or</p> <p><b>MidiMACS Starting Kit (LD) (# 130-090-329)</b> 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</p>
<b>Storage</b>	<p>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.</p>
<b>Maintenance</b>	<p>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.</p>

## 1.1. Important safety information

### Magnetic field hazards



STRONG MAGNETIC FIELD



**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.



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

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

### NOTICE

**The MidiMACS 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 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

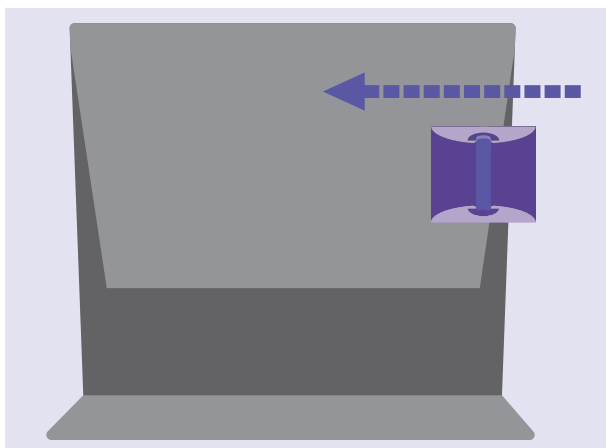
For details, refer to the respective MACS Column data sheets.

## 2. Technical specifications

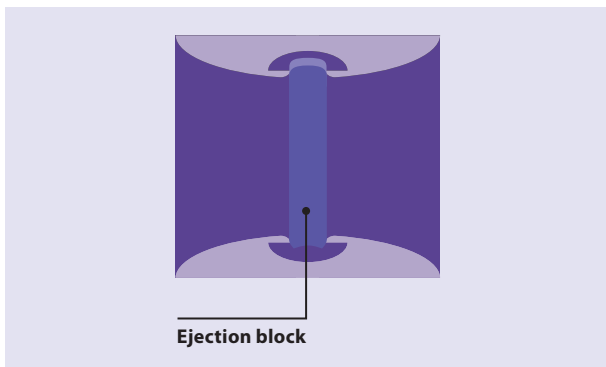
- Weight of the MidiMACS Separator: 300 g
- Size of the MultiStand: 240×205×210 mm (W×D×H)
- Weight of the MultiStand: 2.15 kg

## 3. Instructions for use

1. Attach the MidiMACS Separator to the 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. 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.



3. Place the column with the column wings to the front into the magnetic field of the MidiMACS Separator.
4. 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.

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