

# MiniMACS™ Starting Kit

Order no. 130-090-312

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## 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.

## 1. Description

This product is for research use only.

MiniMACS<sup>™</sup> Separator (# 130-042-102) Components

> 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

Store MACS Cell Separation Reagents Storage

protected from light at 2-8 °C. Do not freeze. The expiration date is indicated on the label. Store separators dry at 15-35 °C and columns dry at 10-35 °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 MiniMACS 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 MiniMACS Separator to be closer than 30 cm to any magnetically sensitive object.

#### 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

MiniMACS Separator allows the performance 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.

## **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 MultiStand.
- Place the column with the column wings to the front into the magnetic field of the MiniMACS Separator.



Figure 1: Assembled MiniMACS Separator.

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.

#### Warranty

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