gentleMACS® M Tubes with Strainer

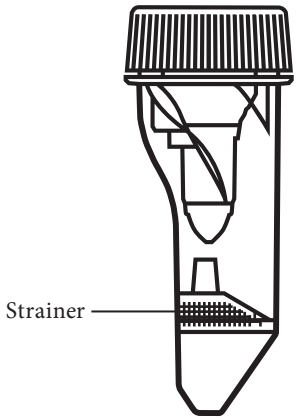
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1. Description

This product is for research use only.

Components	50 M Tubes with Strainer, sterile packed.
Storage	Store tubes dry and protected from light at room temperature (+19 to +25 °C). The expiration date is indicated on the box label. Do not use after this date.



1.1 Background information

The orange-colored gentleMACS M Tubes are designed for automated homogenization using the gentleMACS Dissociators. M Tubes are used for very efficient homogenization of tissues and cells to isolate subcellular material, such as RNA, DNA, and proteins or pathogens. The homogenization procedure is carried out in a closed system, thus avoiding the formation of aerosols and facilitating sterile handling.

The cap of the M Tube bears a rotor and a stator with a septum-sealed opening in the center. An appropriate buffer is pipetted into the opened M Tube and the sample material is added. The tube is tightly closed with the cap. The tube is attached upside down to the sleeves of the gentleMACS Dissociators. It has to be ensured that the sample material is located in the area of the rotor/stator. The homogenization process is started by running an appropriate gentleMACS Program. After processing, the M Tube is detached from the gentleMACS Dissociators and the homogenized sample is removed from the M Tube. When the M Tube is placed in an upright position the strainer retains particles that are larger than 600 µm. Subsequently, the filtered homogenate is pipetted off from the bottom of the tube through the center of the strainer.

1.2 Technical specifications

- Sample sizes
  - 500 µL – maximal 10 mL total volume
  - 20–4000 mg of tissue

  ▲ **Note:** The tubes are suitable for a broad range of tissues, for example, spleen, liver, or brain. However, very hard material, such as bone, may damage the tubes.
- Dimensions
  - Length: 87 mm
  - Diameter: 30 mm
  - Mesh size of the strainer: 600 µm
- Recommended working temperature is between +4 °C to +40 °C.
- Maximal centrifugal acceleration
  Relative centrifugal force (RCF) = 3000 × g
- The tubes are for single use only.
- To close the M Tubes, turn the cap clockwise beyond the first resistance.

1.3 Reagent and instrument requirements

- gentleMACS Octo Dissociator with Heaters or gentleMACS Dissociator
- For removal of the homogenized sample from the closed M Tubes, special pipette tips of extended length are required, e.g., ART® 1000™ REACH pipette tips (Molecular BioProducts, Inc.).

  ▲ **Note:** Regular 1000 µL pipette tips are not suitable for pipetting via the septum. Volumes of up to 200 µL can be added via the septum by using regular pipette tips.
- (Optional) µMACS™ mRNA Starting Kit (# 130-122-752), µMACS One-step cDNA Starting Kit (# 130-091-989).

1.4 Applications

M Tubes are designed for the homogenization of tissues or cells to isolate subcellular material, such as RNA, DNA, and proteins or pathogens.

For further details and more applications, please refer to www.miltenyibiotec.com. The gentleMACS Protocols are also online available at www.miltenyibiotec.com/protocols.

Refer to **www.miltenyibiotec.com** for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit www.miltenyibiotec.com/local to find your nearest Miltenyi Biotec contact.

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