

## MaxSortin® CD13 Beads

### Product Name

**English Name:** MaxSortin® CD13 Beads

### Packaging Specifications

**Filling Volume/CatalogueNumber:** 200µL / TL-681-0200

### Product Performance

**Reactivity Species:** Human

**Endotoxin:** < 2 EU/mL

**Appearance:** Brown liquid

### Intended Use

Nanoscale MaxSortin® CD13 Beads are designed for the enrichment or depletion of human CD13+ cells. By conjugating anti-human CD13 monoclonal antibodies to the beads, CD13+ cells are efficiently isolated and purified through magnetic separation.

### Instructions for Use

Experimental Steps:

- 1.1 Resuspend cells in PBS buffer containing 1% HSA. Count the cells and transfer  $1 \times 10^7$  cells into a 1.5 mL microcentrifuge tube. Centrifuge at 1500 rpm for 5 minutes.
- 1.2 Resuspend the cell pellet in 80 µL MaxSortin® Cell Sorting Buffer (MS-BF). Add 20 µL CD13 Beads and mix thoroughly. Incubate the mixture at 2-8°C for 15 minutes.
- 1.3 Place the MaxSortin® L-Type Column (MS-CL01) into the MACS separator (130-090-976). Pre-wash the column twice with 1 mL Cell Sorting Buffer.
- 1.4 Remove the incubated sample from 2-8°C. Add 1 mL Cell Sorting Buffer, centrifuge at 1500 rpm for 5 minutes, and discard the supernatant.
- 1.5 Resuspend the pellet in 1 mL Cell Sorting Buffer and load the sample onto the L-Type Column. Allow the liquid to flow through naturally. Wash the column twice with 1 mL Cell Sorting Buffer each time, collecting the flow-through in a 15 mL centrifuge tube.
- 1.6 After the buffer has fully passed through, remove the column from the MACS separator and place it into a new 15 mL centrifuge tube. Add 3 mL Cell Sorting Buffer to the column and elute the cells using the plunger.
- 1.7 Centrifuge the collected flow-through at 1500 rpm for 5 minutes in a horizontal centrifuge.
- 1.8 Discard the supernatant and resuspend the cell pellet in 1 mL  $1 \times$  DPBS. Count the cells and perform flow cytometry analysis.

Key Notes:

1. Ensure thorough mixing of beads and cells during incubation to improve sorting efficiency.
2. Prior to use, centrifuge the product at 1000 rpm for 1 minute to pellet residual beads adhering to the tube cap.

**Precautions**

This product is intended for *in vitro* cell culture only. Do not use directly in clinical therapy.

**Storage Conditions**

2-8°C

**Expiration Date**

6 months

**References**

Ziegler-Heitbrock, H. W., & Ulevitch, R. J. (1993). CD13: cell surface receptor and differentiation marker. *Immunology today*, 14(3), 121 – 125. [https://doi.org/10.1016/0167-5699\(93\)90212-4](https://doi.org/10.1016/0167-5699(93)90212-4)