MaxSortin® CD138 Beads

Product Name

English Name： MaxSortin® CD138 Beads

Packaging Specifications

Filling Volume/CatalugueNumber： 1mL / TL-811-1000

Product Performance

Reactivity Species: Human

Endotoxin: < 2 EU/mL

Appearance: Brown liquid

Intended Use

Nanoscale MaxSortin® CD138 Beads are designed for the isolation of CD138+ cells. By conjugating anti-human CD138 monoclonal antibodies to the beads, CD138+ cells are efficiently selected through magnetic separation after incubation with the target cell population.

Instructions for Use

Experimental Steps:

1.1 Resuspend a mixed PBMC sample containing approximately 10% U266 cells in PBS buffer supplemented with 1% HSA. Count the cells and transfer 1×10^7 cells into a 1.5 mL microcentrifuge tube. Centrifuge at 1500 rpm for 5 minutes.

1.2 Discard the supernatant. Resuspend the cell pellet in 90 µL MaxSortin® Cell Sorting Buffer (MS-BF). Add 10 µL MaxSortin® CD138 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 3 mL Cell Sorting Buffer each time to rinse retained cells.

1.6 After the buffer has fully passed through, remove the column from the MACS separator and place it into a labeled 15 mL centrifuge tube. Add 3 mL Cell Sorting Buffer to the column and elute the cells using the plunger. The collected cells are CD138+.

1.7 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. Bead dosage recommendation:

   Add 5 µL beads if the proportion of CD138+ cells is <3%.

   Add 10 µL beads if the proportion of CD138+ cells is ≥3%.

3. This product is not intended for clinical therapy.

4. 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℃

Expiration Date

6 months

References

Ziegler-Heitbrock, H. W., & Ulevitch, R. J. (1993). CD138: cell surface receptor and differentiation marker. Immunology today, 14(3), 121 – 125. https://doi.org/10.1016/0167-5699(93)90212-4