MaxSortin® TCR αβ Beads

Product Name

English Name： MaxSortin® TCR αβ Beads

Packaging Specifications

Filling Volume/CatalugueNumber： 1mL / TL-810-1000

Product Performance

Reactivity Species: Human

Endotoxin: < 2 EU/mL

Appearance: Brown liquid

Intended Use

Nanoscale MaxSortin® TCR αβ Beads can be used to deplete and isolate human TCR αβ+ cells. By conjugating anti-human TCR αβ monoclonal antibody to the beads, magnetic separation is performed after incubation with cells to achieve the separation of TCR αβ+ cells.

Instructions for Use

Experimental Steps:

1.1 Resuspend human PBMCs (Peripheral Blood Mononuclear Cells) in PBS buffer containing 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 Resuspend the cell pellet in 90 µL MaxSortin® Cell Sorting Buffer (MS-BF). Add 10 µL TCR αβ Beads and mix thoroughly. Incubate the mixture at 2-8℃ 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℃. 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, collecting the flow-through in a 15 mL centrifuge tube.

1.6 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 at the bottom.

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

9 months

References

Morath, A., & Schamel, W. W. (2020). αβ and γδ T cell receptors: Similar but different. Journal of leukocyte biology, 107(6), 1045–1055. https://doi.org/10.1002/JLB.2MR1219 - 233R