MaxSortin® CD14 Isolation Kit

Product Name

English Name： MaxSortin® CD14 Isolation Kit

Packaging Specifications

Filling Volume/CatalugueNumber： 1Kit / TL-625KIT

Components:

Component Name	Cat. No.	Specification	Storage conditions	Expiration date
MaxSortin® CD14 beads	TL-625	2mL for 1×10^9 total cells	2~8°C	10months
MaxSortin®Separation Buffer	MS-BF100	100mL	2~8°C	12months
MaxSortin® L Columns	MS-CL01	1piece	10~35°C	12months

Product Performance

Reactivity Species: Human

Endotoxin: < 2 EU/mL

Appearance: Brown liquid

Intended Use

The MaxSortin® CD14 Isolation Kit can be used to enrich or deplete monocytes and macrophages in human PBMCs. By incubating the nanoscale CD14 sorting magnetic beads with cells, the sorting of $CD14^+$ cells is achieved. Through incubating MaxSortin® CD14 sorting magnetic beads with PBMCs and then performing magnetic separation, $CD14^+$ cells can be separated and enriched, fulfilling the function of removing or purifying $CD14^+$ cells.

Instructions for Use

Experimental Procedure:

1.1 Resuspend human PBMC cells in PBS buffer containing 1% HSA, take a sample for counting, and transfer 1×10^7 cells into a 1.5 mL Ep tube. Centrifuge at 1500 rpm for 5 minutes.

1.2 Discard the supernatant, resuspend the cells with 80 μL of MaxSortin® Cell Sorting Buffer, add 20 μL of MaxSortin® CD14 Sorting Magnetic Beads, mix well, and then incubate in a 2 - 8°C refrigerator for 15 minutes.

1.3 Place the MaxSortin® L-Type Separation Column on the MACS sorter and rinse it twice with 1 mL of MaxSortin® Cell Sorting Buffer.

1.4 Take the incubated sample out of the 2 - 8°C refrigerator, add 1 mL of MaxSortin® Cell Sorting Buffer, centrifuge at 1500 rpm for 5 minutes, and discard the supernatant.

1.5 Resuspend the sample with 1 mL of MaxSortin® Cell Sorting Buffer, add the sample to the separation column. After it flows out naturally, add the MaxSortin® Cell Sorting Buffer twice, 1 mL each time, and collect the effluent in a 15 mL tube.

1.6 After all the MaxSortin® Cell Sorting Buffer has flowed out, remove the separation column from the MACS sorter and place it in another new 15 mL centrifuge tube. Add 3 mL of MaxSortin® Cell Sorting

Buffer to the separation column and expel the liquid directly using the plunger provided with the separation column.

1.7 Place the 15 mL centrifuge tube containing the collected liquid into a horizontal centrifuge and centrifuge at 1500 rpm for 5 minutes.

1.8 After centrifugation, discard the supernatant, resuspend the cells with 1 mL of 1×DPBS solution, count the cells, and perform flow cytometry testing.

Precautions：

1.The magnetic beads need to be thoroughly mixed when incubated with cells to improve the sorting efficiency.

2.The buffer and separation column included in this kit are sufficient for initial experiments. For more experimental operations, please purchase additional MaxSortin® Cell Sorting Buffer (Item Number: MS-BF100) and MaxSortin® L-Type Separation Column (Item Number: MS-CL01).

Precautions

This product is only applicable for in vitro cell culture and cannot be used directly for clinical treatment..

References

Ziegler-Heitbrock, H. W., & Ulevitch, R. J. (1993). CD14: cell surface receptor and differentiation marker. Immunology today, 14(3), 121–125. https://doi.org/10.1016/0167-5699(93)90212-4