MaxSortin® CD4 Isolation Kit

Product Name

English Name： MaxSortin® CD4 Isolation Kit

Packaging Specifications

Filling Volume/CatalugueNumber： 1Kit / TL-623KIT

Components:

Component Name	Cat. No.	Specification	Storage conditions	Expiration date
MaxSortin® CD4 beads	TL-623	2mL for 1×10^9 total	2~8℃	6months
MaxSortin®Separation Buffer	MS-BF100	100mL	2~8℃	12months
MaxSortin® L Columns	MS-CL01	1piece	10~35℃	12months

Product Performance

Reactivity Species: Human

Endotoxin: < 2 EU/mL

Appearance: Brown liquid

Intended Use

The MaxSortin® CD4 Isolation Kit is designed for the isolation of human $CD4^+$ T cells. By incubating the nanoscale CD4 sorting magnetic beads with cells, the separation of $CD4^+$ T cells can be achieved. The nanoscale CD4 sorting magnetic beads are incubated with PBMCs and then magnetically separated, which enables the separation and enrichment of $CD4^+$ T cells, fulfilling the function of purifying $CD4^+$ T cells. It is applicable to the production of cell therapy products.

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 CD4 sorting magnetic beads, mix thoroughly, 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 MACS solution, centrifuge at 1500 rpm for 5 minutes, and discard the supernatant.

1.5 Resuspend the sample with 1 mL of MaxSortin® Cell Sorting Buffer and add it 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 centrifuge 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.

Precautions：

Thoroughly mix the magnetic beads when incubating with cells to improve the sorting efficiency.

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) separately.

Precautions

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

References

1. David M Barrett, Nathan Singh, Xiaojun Liu, Shuguang Jiang, Carl H June, Stephan A Grupp, Yangbing Zhao (2014). Relation of clinical culture method to T-cell memory status and efficacy in xeno graft models of adoptive immunotherapy. Cytotherapy. 16(5):619-30.