MaxSortin® CD3 Isolation Kit

Product Name

English Name： MaxSortin® CD3 Isolation Kit

Packaging Specifications

Filling Volume/CatalugueNumber： 1Kit / TL-622KIT

Components:

Component Name	Cat. No.	Specification	Storage conditions	Expiration date
MaxSortin® CD3 beads	TL-622	2mL for 1×10^9 total	2~8℃	7months
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® CD3 Isolation Kit is used for isolating human CD3+ T cells. The isolation of CD3+ cells is accomplished by incubating nanoscale CD3 sorting magnetic beads with 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 Resuspend the cells with 80 μL of MaxSortin® Cell Sorting Buffer, add 20 μL of CD3 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 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 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 that comes with the separation column.

1.7 Place the 15 mL centrifuge tube containing the collected liquid in 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：

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

2.When using this product to remove sorted CD3+ cells, the amount of magnetic beads should be appropriately increased.

3.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

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.