

# 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 <sup>9</sup> total	2~8°C	7months
MaxSortin®Separation Buffer	MS-BF100	100mL	2~8°C	12months
MaxSortin® L Columns	MS-CL01	1 piece	10~35°C	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  $1 \times 10^7$  cells into a 1.5 mL EP tube. Centrifuge at 1500 rpm for 5 minutes.
- 1.2 Resuspend the cells with 80  $\mu$ L of MaxSortin® Cell Sorting Buffer, add 20  $\mu$ L 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.