

User Manual

OriCell™ MSC Characterization Kit (Human)

Catalog No. HUXMX-09011



Introduction

Bone marrow (BM) pluripotent mesenchymal stem cells (MSCs) have the potential to be multi-differentiated and, clinically, can be effectively transplanted into animal models of various diseases. In the future, autologous transplantation will have good application prospects in the field of cell-based regenerative medicine. And human autologous transplantation will also hopefully appear in MSC-based therapy.

OriCell™ MSC Characterization Kit (Human) (Cat. No.: HUXMX-09011) contains a panel of selectable markers for identifying human-derived mesenchymal stem cell populations. The positive cell surface markers include CD29, CD105, CD73, CD166 and CD44. And the negative markers includes CD45, CD14, CD11b, CD34 and HLA-DR.

Note: This product is only provided for further scientific research. It is not intended for diagnostic, therapeutic, clinical, household, or any other applications.

When citing our products in academic journals, please indicate “OriCell™ + Catalog Number, from Cyagen Biosciences (Guangzhou) Inc.”

Product Stability and Storage Conditions

1. All ingredients must be kept in dark place.
2. The product must be stored in a refrigerator at 4°C.
3. Please use all products within the expiration date. Expired ingredients may significantly affect the effect.

Product Information

Category	Components	Volume	Secondary Antibody
Primary Antibody	Mouse IgG1, κ Isotype Control Antibody (Isotype control)	20 μ L	FITC/PE Goat Anti-mouse IgG
	Purified Anti-human CD105	20 μ L	
	Purified Anti-human CD29	20 μ L	
	Purified Anti-human CD73	20 μ L	
	Purified Anti-human CD166	20 μ L	
	Purified Anti-human CD34	20 μ L	
	Purified Anti-human CD45	20 μ L	
	Purified Anti-human CD11b	20 μ L	
	Purified Anti-human CD14	20 μ L	
	Mouse IgG2a, κ Isotype Control Antibody (Isotype control)	20 μ L	
	Purified Anti-human HLA-DR	20 μ L	
	Rat IgG2b, κ Isotype Control Antibody (Isotype control)	20 μ L	FITC/PE Goat Anti-rat IgG
	Purified Anti-mouse/human CD44	20 μ L	
Secondary Antibody	FITC Goat Anti-mouse IgG Antibody	110 μ L	
	FITC Goat Anti-rat IgG Antibody	20 μ L	
	PE Goat Anti-mouse IgG Antibody	110 μ L	
	PE Goat Anti-rat IgG Antibody	20 μ L	

Instructions

Materials Required

- OriCell™ MSC Characterization Kit (Human) (Cat. No.: HUXMX-09011)
- Clean, sterile, stable quality disposable consumables (pipette tips, EP tubes, etc.)
- Flow cytometry buffer (1×PBS with 0.1% BSA)

Steps

1. Resuspend the cells in flow cytometry buffer to adjust the cell concentration to 3×10^6 cells/mL.
2. Take a 1.5 mL EP tube and mark the name of the primary antibody.
3. Take 100 μ L of the cell suspension into an EP tube, add 2 μ L of the primary antibody corresponding to the label name to each tube (about 3×10^5 cells), and mix well.

Note: The isotype control is used to eliminate background staining caused by non-specific binding of antibodies to cells and is a negative control.

4. Incubate at 4°C for 30 min.
5. After incubation, wash the samples twice with 200 μ L of flow cytometry buffer.
6. 250 × g, centrifuged for 5 min. Discard the supernatant.
7. Add 100 μ L of flow cytometry buffer to each group.
8. Add 2 μ L of fluorescent secondary antibody against the primary antibody to each group, and resuspend the cells.

Note: This kit contains two secondary antibodies labeled with different fluorophores. Please choose according to the actual condition of your cells to avoid spectral overlap between the secondary antibodies and the fluorescent proteins expressed by the cells.

9. Incubate at 4°C for 30 min.
10. After incubation, wash the samples twice with 200 μ L of flow cytometry buffer.
11. 250×g, centrifuged for 5 min. Discard the supernatant.
12. After resuspending the cells in 300~500 μ L of flow cytometry buffer, run the test immediately.

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