Tofflon Bio-reagent

MSCs Serum-free Culture Medium Kit

Product Introduction

MCM CulMsc-SFM30 culture kit is developed for human umbilical derived MSCs, human placenta MSCs, and human adipose MSCs expansion. The kit is component clear, serum-free, animal origin-free and low protein level. It adapts primary MSCs separate and stable passage and maintains MSC differentiation potential (osteogenesis, adipogenesis, and chondrogenesis).

Product Information

Product	Catalogue	Item No.	Specification
MSCs Serum-free Culture Medium	MCM CulMsc-SFM30(with phenol red)	CM030-500	500mL/set
MSCs Serum-free Culture Medium	MCM CulMsc-SFM30(A)(without phenol red)	CM030(A)-500	500mL/set

Product Advantages

- Serum-free, animal origin-free and low protein level;

- Completely support serum-free culture, no serum or serum substitute required, and suitable for bioreactor;

- Adapt primary MSCs separate (Enzyme digestion and tissue explant);

- Stable passage and maintain MSC differentiation potential;

- cGMP standard production conditions, using disposable manufacturing techniques to ensure highly stable and consistency of different batches.

Using Method

1. Culture carrier coating: for different sizes of culture plates/flasks/cell factories, add the appropriate amount of coating solution and incubate for 1-2h for coating.

2. Primary isolation culture/cell inoculation: inoculation of tissue blocks/enzyme digested or recovered MSCs onto well coated culture vectors for culture.

3. Cell passaging culture: Trypsin digestion, cell collection by centrifugation, and continued passaging culture according to a certain density;

4. Cell harvesting and freezing of cells: trypsin digestion, centrifugation to collect cells, freezing at a certain density with lyophilization solution
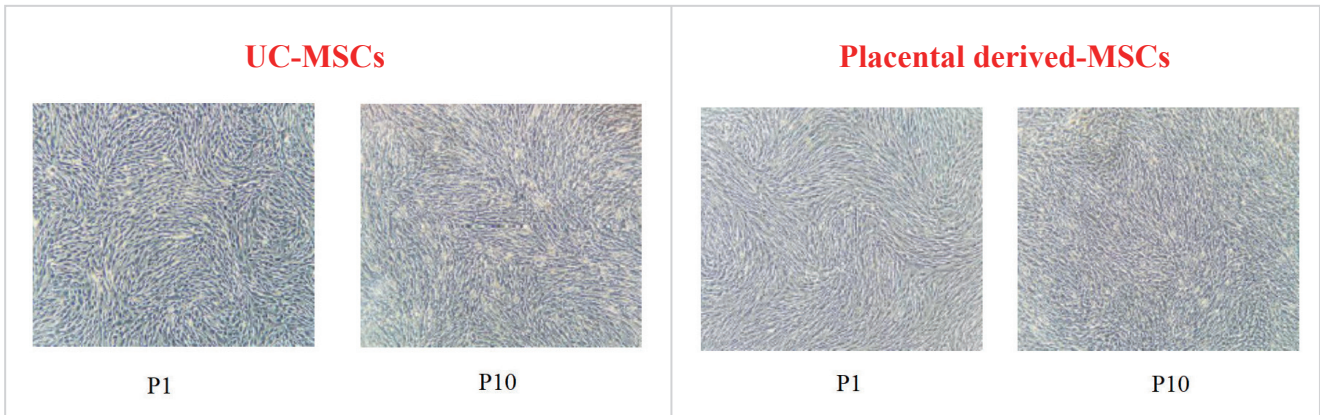
Figure 1, Cell morphology

UC-MSCs		Placental derived-MSCs	
P1	P10	P1	P10

Figure 2, Cell flow assay

Cell Type	CD73$^+$	CD90$^+$	CD105$^+$	CD34$^+$	CD45$^+$
UC-MSCs, P1	99.8%	99.5%	98.1%	<0.2%	<0.2%
PL-MSCs, P1	99.6%	99.1%	98.4%	<0.2%	<0.2%

Figure 3, Cellular lipogenic，osteogenic differentiation capacity

UC-MSCs, P5   PL-MSCs, P5

Adipogenesis

Osteogenesis