

## Human Mesenchymal Stem Cells (hMSCs) Serum-Free Medium

Cat. No. : CM-SC01

Size : 100mL / 500mL

### Product Description

Human Mesenchymal Stem Cells (hMSCs) Serum-Free Medium is a serum-free product developed by Procell's R&D team. It is suitable for the culture of human mesenchymal stem cell in serum-free conditions and it can maintain a good proliferation rate of human mesenchymal stem cells and good differentiation ability.

It has definite chemical composition, serum-free, and with no animal-derived ingredients. It has small batch-to-batch differences and is very suitable for the culture of mammalian stem cells. It can be used for primary cell isolation and cell passage culture of human mesenchymal stem cells from various sources, such as human bone marrow mesenchymal stem cells (BM-hMSC), human adipose mesenchymal stem cells (AT-hMSC), human umbilical cord mesenchymal stem cells (UCM-hMSC), etc.

### Product Component

Product name	Size	Storage	Expiry
Human Mesenchymal Stem Cells (hMSCs) Serum-Free Basic Medium	100 mL/bottle	500 mL/bottle	2-8°C, shading light 12 months
Human Mesenchymal Stem Cells (hMSCs) Serum-Free Growth Additive (hMSCs)	1 mL/bottle	5 mL/bottle	-5~20°C, shading light 12 months

The main components contains: amino acids, vitamins, inorganic salts, albumin, transferrin, insulin, trace elements, etc.

### Product Use Instructions

1. Melt Human Mesenchymal Stem Cells (hMSCs) Serum-Free Growth Additive (hMSCs) at 2-8°C overnight and add it to Human Mesenchymal Stem Cells (hMSCs) Serum-Free Basic Medium at a ratio of 1:100 to prepare Human Mesenchymal Stem Cells (hMSCs) Serum-Free Complete Growth Medium.

**Reminder:** The prepared Human Mesenchymal Stem Cells (hMSCs) Serum-Free Complete Growth Medium can be stored for 30 days at 2-8°C with shading light. For small-scale and frequent usage, it is recommended to aliquot the Mesenchymal Stem Cell Serum-Free Growth Supplement (MSCGs) and store it in a -5~20°C freezer. This approach helps prevent unnecessary waste of the medium.

2. Before use: Take the complete medium out of the refrigerator into a biosafety cabinet or clean bench, gently add an appropriate amount (for example, 5 mL for a T-25 flask) of complete medium along the upper edge of the mesenchymal stem cell culture flask. Avoid disturbing the bottom surface, which is the cell growth area. Slowly lay the culture flask flat and then place it in a 37°C, CO<sub>2</sub> incubator for 5-10 minutes before proceeding.

**Important Note:** It is crucial to follow these steps carefully to prevent the formation of "growth voids", or blank areas where cells fail to grow. Many users employ standard culture flasks or dishes instead of specialized pre-coated ones, which are not ideal for serum-free conditions required by mesenchymal stem cells. The 5-10 minute incubation at 37°C helps

adhesion-promoting factors in the medium bind more effectively to the flask's bottom surface, thereby improving mesenchymal stem cell attachment and minimizing the risk of "growth voids".

## Notes

1. When using this product, pay attention to aseptic operation to avoid contamination;
2. After preparing into complete growth culture medium, store it at 2-8°C with shading light for 3-4 weeks;
3. For better use effect, do not freeze and thaw the reagent repeatedly;
4. This product is only used for scientific research or further research, not for diagnosis and treatment.