

## Human Mesenchymal Stem Cells Serum-Free Medium, with Serum Replacement

Cat. No. : CM-SC02

Size : 500mL

### Product Description

Human Mesenchymal Stem Cells Serum-Free Medium, with Serum Replacement has been meticulously optimized by the Procell's technical team. It contains serum-free additives and other auxiliary components that have been carefully selected and proportioned. This product is suitable for the serum-free culture of human mesenchymal stem cells; it can maintain a good proliferation rate of human mesenchymal stem cells and preserve their excellent differentiation potential.

Human Mesenchymal Stem Cells Serum-Free Medium, with Serum Replacement is specifically designed for human mesenchymal stem cells (including umbilical cord mesenchymal stem cells, bone marrow mesenchymal stem cells, adipose mesenchymal stem cells, etc.). After the cell attachment rate reaches 75-85% during the stem cell isolation process, this medium can be used for subculture. Compared with the traditional medium supplemented with animal serum, the human mesenchymal stem cells serum-free medium, with serum replacement maintains the undifferentiated growth of mesenchymal stem cells, retains their morphological characteristics and normal subculture frequency, and ensures the high proliferation rate and differentiation potential of mesenchymal stem cells.

### Product Component

Product name	Size	Storage	Expiry
CM-SC02 Serum-Free Basal Medium	500mL/bottle	2-8°C, shading light	12 months
CM-SC02 Serum-Free Supplement	10mL/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 Serum-Free Supplement at 2-8°C overnight and add it to Human Mesenchymal Stem Cells Serum-Free Medium, with Serum Replacement at a ratio of 1:50 to prepare Human Mesenchymal Stem Cells Serum-Free Complete Medium, with Serum Replacement.

**Reminder:** The prepared complete 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 Human Mesenchymal Stem Cells Serum-Free Supplement 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.