

## Bioreactor MSCCult I

DMEM/F-12, EGF, FGF, PDGF, Human Serum Albumin (U.S.P), Pyruvate acid,  
L-Glutamine

**Catalog number: 246**

**Size:** 500 mL

### Intended Use:

Bioreactor MSCCult I was developed for scaling – up of mesenchymal stem cells (from adipose, umbilical cord, bone marrow) with Quantum Expansion System.

Bioreactor MSCCult I can be used for mesenchymal stem cells derived from various sources, including bone marrow, umbilical cord, adipose tissue and dental pulp tissue.

Bioreactor MSCCult I is for *in vitro* use only. Not suitable for diagnostic, therapeutic and clinical procedures.

### Summary and Explanation:

Bioreactor MSCCult I has been developed to maintain and maximise the growth of mesenchymal stem cells in culture setting. Bioreactor MSCCult I is implemented adherence elements to induce the efficiency of cell expansion and a complete and xeno-free media, enriched with U.S.P-qualified human serum albumin and essential growth factors. Further, HEPES buffer is added to maintain physiological pH of Bioreactor MSCCult I inside of an incubator.

Bioreactor MSCCult I does not contain antibiotics and antimycotics, diminishing any perturbation on stem cells which is ideal for scientific research and manufacturing purposes.

### Known Applications:

Bioreactor MSCCult I demonstrates a good proliferative effect on mesenchymal stem cells from adipose tissue, umbilical cord tissue, bone marrow and dental pulp tissue from both human and mice.

### Reagents Provided:

- 500 mL Bioreactor MSCCult I

### Reconstitution, Dilution and Mixing:

Bioreactor MSCCult I is prepared at 1X concentration. No dilution is required.

### Materials and Reagents Required But Not Provided:

Not applicable.

### Storage and Stability:

Stored at -20 – 8°C. Avoid prolonged light exposure.

Shelf life at 12 months.

### Instructions for Use:

*For culturing cells*

1. Collect cell pellet. Resuspend cells in PBS, Washing Buffer or Bioreactor MSCCult I. Mix thoroughly to achieve a homogenous cell suspension.
2. Remove a sample for cell counting. Determine total number cells.
3. Pipet the appropriate volume of cell suspension according to recommended seeding density, into bioreactor.
4. Add an appropriate amount of Bioreactor MSCCult I (\*) according to bioreactor procedure.
5. Load mixture of cell and Bioreactor MSCCult I into bioreactor.
6. Feed cell with Bioreactor MSCCult I into bioreactor at appropriate input rate.
7. Using lactate and glucose index to control the input rate of Bioreactor MSCCult I until cell is harvested.

\* *Pre-warming media is optional.*

Bioreactor Deattachment Advanced 100 mL	250
---	-----

### Limitations:

Not applicable

### Quality Control:

- pH: 7.2 – 8.2
- Colour: Clear red-pink
- Osmolality: 286-356 mOsm/kg
- Sterility: Negative
- Mycoplasma: <0.9 RLU/s
- Endotoxin: ≤ 1 EU/mL
- Volume: 100 (+1) mL, 500 (+5) mL
- Mesenchymal stem cell culture assay
  - Adhesion ability: Yes
  - Peeling/shrink phenomenon: No
  - Proliferation ability: Yes

### Precautions:

Do not use the product if the packaging is compromised or cracked and/or the media shows discolouration and cloudy appearance.

Bioreactor MSCCult I is sold under frozen condition. Before using, media should be defrosted and repetitively pipetted to be mixed thoroughly.

### Troubleshooting:

Not applicable

### Explanation of symbols and warnings

The symbols on produce label are explained below:

			
Use By:	Batch code	Keep away from light	Catalog number
			
Temperature Limitation	Consult instructions for use	Caution, consult accompanying documents	Sterilized using aseptic processing techniques

### Related products

Products	Catalog No.
Bioreactor Biocoating Solvent 100 mL	251
Bioreactor Washing Buffer 500 mL	249

To purchase other products, please visit:

<http://biomedmart.org>

For further information: Please contact us at:

[contact@sci.edu.vn](mailto:contact@sci.edu.vn)

[sales@sci.edu.vn](mailto:sales@sci.edu.vn)