

## USER MANUAL Product: MSCCULT II

### Contents:

DMEM/F12; EGF; FGF; PDGF, Albumin, Pyruvate acid.

**Reference number: 296, 409**

**Size:** 500 mL bottle.

### Intended Use:

For research or manufacturing purposes only.

### Overview Product:

MSCCult II is a specialized medium designed for the culture and proliferation of mesenchymal stem cells derived from various sources such as adipose tissue, umbilical cord tissue, bone marrow.

MSCCult II is a high-efficiency cell proliferation culture medium with low-endotoxin ( $\leq 1.0$  EU/mL), mycoplasma-free. It is sterilized (0 CFU) and has a pH range of 7.2 – 8.2 and osmotic pressure of 286 – 356 (mOsm/kg), furthermore, cell culture assessments on mesenchymal stem cells demonstrated their ability to adhere and proliferate in culture vessels without experiencing shrinkage or exfoliation.

The medium is free from animal-derived proteins, phenol red, and antibiotic-antimycotic. It does not require pre-coating of the culture vessels before use.

The medium employs phenol red, yet excludes antibiotics-antimycotics.

### Known Applications:

MSCCult II promotes high proliferation in human mesenchymal stem cells derived from umbilical cord, adipose tissue, dental pulp, and placenta tissue.

### Reconstitution, Dilution, and Mixing:

The product is delivered at a 1X concentration, requiring no further dilution or supplementation.

### Materials and Reagents Required But Not Provided:

Not applicable.

### Handling and Storage:

Store at a temperature between  $-20^{\circ}\text{C}$  and  $8^{\circ}\text{C}$ .

Avoid exposure to light.

Recommended expiration date:

- 12 months:  $-20^{\circ}\text{C}$  -  $0^{\circ}\text{C}$ .
- 2 months:  $0^{\circ}\text{C}$  -  $8^{\circ}\text{C}$ .

### Instructions for Use:

For cell culture:

1. Incubate the MSCCult II medium at  $37^{\circ}\text{C}$ . It is recommended to aliquot the medium into smaller portions and transfer them into sterile containers. Then, place the containers in a temperature-controlled incubator set at  $37^{\circ}\text{C}$ .
2. Collect the cell pellet. Resuspend the cell pellet in MSCCult II medium. Mix thoroughly to obtain a homogeneous cell suspension.
3. Take a cell sample for counting. Determine the total number of cells.
4. Use a pipette to aspirate a volume of the cell suspension according to the recommended seeding density, and then transfer it into the culture vessel for cell cultivation.
5. Add an appropriate amount of MSCCult II ( $0.12$  mL/cm<sup>2</sup>) to the culture vessel containing the cells. For a T25 flask, a minimum of 2 mL is recommended, while

for a T75 flask, a minimum of 7 mL is recommended.

- Transfer the cell containing flask to the incubator for cultivation (37 °C, 5% CO<sub>2</sub>).

**Precautions:**

Do not use the product if the packaging is damaged or cracked, if the medium has changed colour or appears turbid.

For frozen medium, thaw and mix thoroughly before use.

Do not freeze and thaw more than 3 times to preserve the quality of the product.









To ensure the best cell quality during passage, use Deattachment for cell dissociation (Product code 121 or 120).

**First Aid Measure:**

Not applicable

**Hazards Identification:**

The symbols on produce labels 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 Name	Reference Number
<b>MSCCult I</b> 500 mL	108; 408
<b>Washing Buffer</b> 100 mL 500 mL	149 150
<b>Deattachment</b> 100 mL 500 mL	120, 411 121
<b>ThawBest</b> 100 mL 500 mL	142 143

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