

Immune Cell Serum-free Culture Medium Instruction

【Product Identification】

Immune Cell Serum-free Culture Medium

【Catalog Number】

MCM-001

【Packaging Specifications】

1L/bottle

【Intended Use】

The medium consists of a basal culture medium and cell growth factors. It is used for the in vitro cultivation of human lymphocytes. The cultured cells are intended solely for clinical in vitro auxiliary diagnosis.

【Principle】

For the in vitro cultivation of human lymphocytes, in addition to providing the basic substances required for cell growth, such as water, glucose, amino acids, inorganic salts, vitamins, and trace elements, it is also necessary to add non-animal-derived substances that can replace serum components. After these components are sterilized by filtration, they are formulated into a human immune cell serum-free medium. Furthermore, by adding cell growth factors, this medium enables the cultivation and expansion of human peripheral blood lymphocytes in an in vitro environment.

【Storage Conditions & Shelf Life】

Unopened: 12 months at 2-8°C

Opened: 30 days at 2-8°C (maintain sterility)

【Compatible Instruments】

Not applicable.

【Sample Requirements】

Fresh heparinized human peripheral blood (aseptically collected).

Storage: 2-8°C: ≤6 hours 18-25°C: ≤4 hours (indoor temperature)

【Protocol】

Transfer the cell suspension into the cell culture flask. Add a specific volume of the immune cell serum-free medium to the flask to achieve a cell seeding density of 1×10^6 to 2×10^6 cells/mL. Place the culture container into a 37°C, 5% CO₂ incubator for culture.

【Reference Interval OR Cut-off Value】

None

【Result Interpretation】

Cellular metabolic byproducts cause the medium color to gradually change to golden yellow. This color change indicates a decrease in the medium's pH. To avoid negatively impacting cell growth, it is necessary to replenish the medium promptly.

【Limitations】

Several factors can lead to errors in cell counting. Users can perform multiple counts and calculate the average.

【Product Performance Specifications】

1. Appearance: The label needs to be clear and easily identifiable. There should be no liquid leakage.
2. Clarity: The liquid should be clear and free from any visible particles or impurities.
3. pH: 6.4 ~ 8.3
4. Osmolality: 223 ~ 301mOsmol/kg
5. Endotoxin: < 0.5 EU/mL.
6. Bacteria: No bacteria detected.
7. Fungi: No fungi detected.
8. Mycoplasma: No mycoplasma detected.
9. Cell growth test
 - 9.1 Cell Expansion Fold: This is determined by the proliferation characteristics of different lymphocytes. For example, cells such as CTL, NK, CIK, and TIL can be expanded by more than 200-fold. When used for culturing DCs (Dendritic Cells), it allows for the long-term maintenance of their function and activity as antigen-presenting cells.
 - 9.2 Cell Viability: The proportion of live cells is >90%.



【Precautions】

1. After opening, store at 2~8°C.
2. The entire operation process should be carried out under sterile conditions to avoid microbial contamination.
3. If contact with the skin occurs during use, wash immediately with water. If discomfort persists, seek medical attention promptly.
4. Do not use it if the packaging shows cracks or damage.
5. Expired products must not be used.

【Explanation of the logo】

None.

【Manufacturer Information】

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