

**Nanobacteria Removal Complete Medium (10) (RPMI-1640)**

Cat. No. : PM150110B-HR

Size : 125mL×4

**General Information**

<b>Product Form</b>	Liquid
<b>Concentration</b>	Ready-to-use
<b>Components</b>	RPMI-1640[PM150110]+10% Nutrient+1% Supplement+Anti-Nanobacteria Treatment Reagent[P-CMR-002]
<b>Bacterial detection</b>	Negative
<b>Fungal detection</b>	Negative
<b>Mycoplasmal detection</b>	Negative
<b>Endotoxin level</b>	< 3 EU/mL
<b>Shipping</b>	Ice bag
<b>Storage</b>	2-8°C, Shading Light
<b>Expiry date</b>	6 months

**Product Introduction**

RPMI-1640 is an improved McCoy's 5A medium, which uses bicarbonate buffer system. RPMI-1640 medium was originally designed for lymphocyte culture. Nowadays, it has been widely used in the culture of normal cells and cancer cells, especially suspension cells, which is one of the most widely used media.

RPMI-1640 medium contains many kinds of amino acids, vitamins, inorganic salts and other ingredients for cell culture, but does not contain protein, lipids or any growth factors. Therefore, the product should be used serum or serum-free additives.

Nanobacteria and their decomposition complexes are the common contaminant in cell cultures that co-exists with cells. Antibiotics are usually ineffective. Nanobacteria grows competitively with cells, which is unfavorable to cell growth, and in severe cases causes cell death. At present, many cells are contaminated with nanobacteria, which has a great impact on cell culture and subsequent experiments. The common characteristics of cells contaminated by nanobacteria are as follows: (1) The medium is not turbid, but when the cells are observed under a microscope, there are many "small black spots" around the cells or in the culture medium. With the extension of culture time, the "small black spots" gradually increase, and they cannot be removed by changing the culture medium or washing the cells.

(2) The cells contaminated by the "small black spots" consume fast nutrients and require frequent replacement of the culture medium.

(3) Nanobacteria-contaminated cells grow slowly, have poor cell states, and are severely vacuolated. They may even cause changes in cell morphology. Therefore, it is of great significance to clean up nanobacteria contamination in cell culture.

Anti-Nanobacteria media is a new generation product developed by our team on the basis of Biomocin products. It contains special ingredients to remove nanobacteria. This product has been tested on hundreds of cells and verified by long-term experiments. It is harmless to cells and has a significant effect on removing and inhibiting nanobacteria.

**Guidelines for use**

1. Procell's cell culture media undergoes strict quality control to ensure sterility, but may get contaminated during use. Follow these guidelines for sterile handling to avoid contamination.

2. Always wipe your gloved hands and work area with 70% ethanol.
3. Wipe the outside of the containers, flasks, plates, and dishes with 70% ethanol before placing them in the cell culture hood.
4. Use sterile pipette tips and pipettes to work with liquids, and use each pipette tip only once to avoid cross contamination. Do not unwrap sterile pipettes until they are ready to be used. Keep pipettes and tips within the clean work area.
5. Do not talk while performing sterile procedures and perform your cell culture as efficiently and carefully as possible to minimize contamination.

## Quality control

Standard evaluations for cell culture media are pH, osmolality, endotoxins and sterility testing for liquid products, cell growth experiments.

## Notes

1. This product is for research use only.
2. This product is sterilized by 0.1  $\mu\text{m}$  filtration.
3. It is necessary to pay attention to the aseptic operation and avoid the contamination during the culture.
4. It is not suitable for long time storage at room temperature.
5. This product is a ready-to-use medium. If there is no special need, don't add serum, penicillin and streptomycin. It can be used directly.