RPMI-1640 (Without Phenol Red) Product manual

Basic Information

Cat.NO	Size	Shelf	Form	Storage	Transportation
CMB0050	500mL	12 months	Liquid	Store at 2-8°C away from light	Room Temperature

Product Introduction

RPMI 1640 medium is named after the Roswell Park Memorial Institute (RPMI), where it was developed, and 1640 is the code name of the medium. RPMI-1640 medium was originally designed for lymphocyte culture, but is now widely used in the culture of various normal cells and cancer cells, especially suspension cells, and is one of the most widely used culture media.
This product contains a variety of ingredients such as amino acids, vitamins, and inorganic salts required for various types of cell culture, but does not contain proteins, lipids, or any growth factors, so this product must be used with serum or serum-free supplements.

Phenol red is used as a pH indicator in culture media to continuously monitor the pH of the culture medium. At low pH values, phenol red makes the culture medium yellow, while at higher pH values, the culture medium turns purple. It turns red at pH 7.2-7.4, which is most suitable for cell culture. However, phenol red also has some disadvantages. Studies have shown that phenol red can simulate the effects of steroid hormones (especially estrogen). Therefore, when using estrogen-sensitive cells (such as breast tissue), it is best to use a culture medium that does not contain phenol red. Phenol red can interfere with detection during flow cytometry analysis. In addition, the presence of phenol red in some serum-free culture medium formulas can interfere with sodium-potassium balance.

Instructions

1. Balance the culture medium and related solutions in a water bath or at room temperature, and prepare the culture medium required for the experimental cells;
2. Cell inoculation: Remove the cells to be cultured from the original culture container, wash with appropriate culture medium or PBS, and adherent cells need to be digested with trypsin;
3. Collect the cells by centrifugation, centrifuge at 1000rpm for 3 min at room temperature, and discard the supernatant;
4. Add fresh culture medium to resuspend the cells. Then inoculate the cell suspension into the culture bottle with the corresponding volume of culture medium, mix gently, and culture at 37°C and

5% CO_2 saturated humidity. Observe and replace fresh culture medium regularly according to cell growth and cell density.

Precautions

1. During the entire process, be sure to pay attention to aseptic operation to avoid contamination;
2. To maintain the best use effect of this product, do not perform freeze-thaw treatment;
3. This product is only used for research or further research, not for diagnosis and treatment.