DMEM,High Glucose (Without Phenol Red) Product manual

Basic Information

Cat.NO	Size	Shelf	Form	Storage	Transportation
CMB0053	500mL	12 months	Liquid	Store at 2-8°C away from light	Room Temperature

Product Introduction

Dulbecco's Modified Eagle Medium (DMEM) is developed on the basis of MEM medium. Compared with MEM medium, the amino acid content is increased by 2 times, the vitamin content is increased by 4 times, and non-essential amino acids, trace iron ions and sodium pyruvate are also added. The glucose content of DMEM medium was originally designed to be 1000 mg/L (low sugar type), and later it was developed to have a glucose content of 4500 mg/L (high sugar type). It is now widely used in the culture of various cells. This product contains a variety of ingredients such as amino acids, vitamins, inorganic salts, etc. required for the culture of various types of cells, but does not contain proteins, lipids or any growth factors, so this product must be used with serum or serum-free additives.

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.