Ham's F-12 (Without Phenol Red) Product manual

Basic Information

Cat.NO	Size	Shelf	Form	Storage	Transportation
CMB0080	500mL	12 months	Liquid	Store at 2-8°C away from light	Room Temperature

Product Introduction

Ham's F-12 Nutrient Mixture was designed by Ham in 1969 based on Ham's F-10 Nutrient Mixture and was originally used for serum-free culture of CHO cells. Ham's F-12 is often used as a basic culture medium for serum-free culture. When the serum content is low, it is particularly suitable for single cell culture and cloning culture. After adding serum, it is also widely used in the culture of cancer cells and primary cells, such as rat hepatocytes, rat prostate epithelial cells, chondrocytes, rat myoblasts, chicken embryonic cells, etc. In addition, when equal volumes of Ham's F-12 and DMEM are mixed, the resulting DMEM/F12 medium is more nutritious and more widely used.

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.