

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

Basic Information

Cat.NO	Size	Shelf	Form	Storage	Transportation
CMC0039	500mL	6 months	Liquid	Store at 2-8°C away from light	2-8°C

Product Introduction

Components	Ham's F-12 (Without Phenol Red) (CMB0080)+10% Nutrient+1% Supplement
Concentration	Ready-to-use
Bacteria Detection	Negative
Fungi Detection	Negative
Mycoplasma Detection	Negative
Endotoxin Content (EU/mL)	< 3

Background

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.

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, please do not perform freeze-thaw treatment;
3. This product is only used for research or further research, not for diagnosis and treatment.

-
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.