IMDM (Without Phenol Red) Complete Medium Product manual

Basic Information

Cat.NO	Size	Shelf	Form	Storage	Transportation
CMC0031	500mL	6 months	Liquid	Store at 2-8°C away from light	2-8°C

Product Introduction

Components	IMDM (Without Phenol Red)(CMB0072)+10% Nutrient+1% Supplement
Concentration	Ready-to-use
Bacteria Detection	Negative
Fungi Detection	Negative
Mycoplasma Detection	Negative
Endotoxin Content (EU/mL)	< 3

Background

IMDM (Iscove's Modified Dulbecco Medium) is Iscove's modified DMEM medium, which was designed by Guilber and Iscove in 1976 for culturing erythroid precursor cells and macrophages. IMDM medium is based on DMEM medium and contains selenium, HEPES, sodium pyruvate, and additional amino acids and vitamins. It is very nutritious and very suitable for rapid proliferation and high-density cell culture. IMDM medium can not only culture cells with special nutritional requirements (such as mouse B lymphocytes, LPS-stimulated B cells, bone marrow hematopoietic cells, T lymphocytes, and various hybridoma cells), but can also be used as the base liquid for some unique serum-free 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. Therefore, 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.

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.