

IMDM(Iscove's Modification of DMEM)

货号: I7940

规格: 500ml

有效期: 2-8°C避光保存, 有效期 12 个月。

产品简介:

Iscove等人的研究表明红细胞和巨噬细胞的前体细胞 (precursor cell) 能够在完全无血清的培养基中生长, 该培养基需要辅以albumin, transferrin, lecithin以及selenium。IMDM是在DMEM的基础上进行了改进, 加入selenium, 氨基酸和维生素, sodium pyruvate, HEPES, 以及potassium nitrate取代DMEM中的ferric nitrate。进一步研究表明IMEM支持鼠B淋巴细胞、骨髓中的造血组织 (hemopoietic tissue)、lipopolysaccharide刺激的B细胞、T淋巴细胞及多种杂交瘤细胞等的生长。

该产品使用HEPES缓冲体系, 含有L-glutamine和Phenol red, 不含alpha-thioglycerol和beta-mercaptoethanol。

渗透压: 285±20 mOsm

酸碱度: 7.2±0.2

| Components | Concentration (mg/L) |
|---|----------------------|
| <i>Inorganic Salts</i> | |
| CaCl ₂ (anhydrous) | 165.00 |
| KCl | 330.00 |
| KNO ₃ | 0.076 |
| MgSO ₄ (anhydrous) | 97.70 |
| Na ₂ SeO ₃ | 0.0173 |
| NaCl | 4505.00 |
| NaH ₂ PO ₄ • H ₂ O | 125.00 |
| NaHCO ₃ | 3024.00 |
| <i>Amino Acids</i> | |
| L-Alanine | 25.00 |
| L-Arginine • HCl | 84.00 |
| L-Asparagine • H ₂ O | 28.40 |
| L-Aspartic acid | 30.00 |
| L-Cystine • 2HCl | 91.24 |
| L-Glutamic acid | 75.00 |
| L-Glutamine | 584.00 |
| Glycine | 30.00 |
| L-Histidine • HCl • H ₂ O | 42.00 |
| L-Isoleucine | 105.00 |

| | |
|--------------------------------------|---------|
| L-Leucine | 105.00 |
| L-Lysine • HCl | 146.00 |
| L-Methionine | 30.00 |
| L-Phenylalanine | 66.00 |
| L-Proline | 40.00 |
| L-Serine | 42.00 |
| L-Threonine | 95.00 |
| L-Tryptophan | 16.00 |
| L-Tyrosine • 2Na • 2H ₂ O | 103.79 |
| L-Valine | 94.00 |
| <i>Vitamins</i> | |
| Biotin | 0.013 |
| D-Calcium pantothenate | 4.00 |
| Choline chloride | 4.00 |
| Folic acid | 4.00 |
| <i>i</i> -Inositol | 7.20 |
| Nicotinamide | 4.00 |
| Pyridoxine • HCl | 4.00 |
| Riboflavin | 0.40 |
| Thiamine • HCl | 4.00 |
| Vitamin B12 | 0.013 |
| <i>Other</i> | |
| D-Glucose | 4500.00 |
| HEPES | 5958.00 |
| Phenol red, Na | 15.00 |
| Sodium pyruvate | 110.00 |

参考文献:

1. Iscove, N.N and Melchers, F. (1978). Complete Replacement of Serum by Albumin, Transferrin, and Soybean Lipid in Cultures of Lipopolysaccharide-Reactive B Lymphocytes. *J. Exp. Medicine.* 147, 923-933.
2. Iscove, N.N., Guilbert, L.J. and Weyman, C. (1980). Complete Replacement of Serum in Primary Cultures of Erythropoietin Dependent Red Cell Precursors [CFU-E] by Albumin, Transferrin, Iron, Unsaturated Fatty Acid, Lecithin and Cholesterol. *Exp. Cell Research.* 126, 121-126.