Alpha MEM (Minimum Essential Medium, Eagle, Alpha Modification)

With Earle's Salts, L-Glutamine, Sodium Bicarbonate, Deoxy-ribonucleosides & Ribonucleosides

Cat. No. CPA002 | Size: 500 ML / 1L

1. Product Description

Alpha MEM is a modified version of MEM (Minimum Essential Medium) supplemented with NEAA, pyruvate, lipoic acid, vitamin B12, biotin, and ascorbic acid. Alpha-MEM is widely used for the attachment and suspension culture of various animal cells, such as keratinocytes, primary rat astrocytes, and human melanoma cells, as well as for the selection of transformed DHFR-negative cells. Notably, this product contains 4 types of Deoxy-ribonucleosides and 4 types of Ribonucleosides.

2. Composition

Amino Acids	mg/L
L-Alanine	25.0
L-Arginine-HCl	127.0
L-Asparagine-H_2O	50.0
L-Aspartic Acid	30.0
L-Cysteine-HCl-H_2O	100.0
L-Cystine-2HCl	31.0
L-Glutamic Acid	75.0
L-Glutamine	292.0
Glycine	50.0
L-Histidine-HCl-H_2O	42.0
L-Isoleucine	52.4
L-Leucine	52.0
L-Lysine-HCl	73.0
L-Methionine	15.0
L-Phenylalanine	32.0
L-Proline	40.0
L-Serine	25.0
L-Threonine	48.0
L-Tryptophan	10.0
L-Tyrosine-2Na	52.0
L-Valine	46.0

Vitamins & Others	mg/L
Ascorbic Acid	50.0
D-Ca Pantothenate	1.0
Biotin	0.1
Choline Chloride	1.0
Folic Acid	1.0
i-Inositol	2.0
Niacinamide	1.0
Pyridoxal-HCl	1.0
Riboflavin	0.1
Thiamine-HCl	1.0
Vitamin B12	1.4
Inorganic Salts	**mg/L**
$CaCl_2$	200.0
KCl	400.0
$MgSO_4$	97.7
NaCl	6800.0
$NaHCO_3$	2200.0
$NaH_2PO_4 \cdot H_2O$	140.0

Others & Nucleosides	mg/L
D-Glucose	1000.0
Lipoic Acid	0.2
Phenol Red	10.0
Sodium Pyruvate	110.0
Adenosine	10.0
Cytidine	10.0
Guanosine	10.0
Uridine	10.0
2'-Deoxyadenosine	10.0
2'-Deoxycytidine-HCl	11.0
2'-Deoxyguanosine	10.0
Thymidine	10.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.3 ± 0.3	300 ± 15 mOsm/kg H_2O	<1 EU/mL	Sterile

4. Storage Conditions and Precautions

Store at refrigerated temperatures (2~8°C) protected from direct light. The expiration date is indicated on the product label; do not use expired products. Product degradation may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Storing against the inner walls of a refrigerator where temperatures may approach 0°C can cause degradation due to ice crystal formation. The addition of extra substances may also cause degradation.

5. Usage Instructions and Precautions

This product is a sterile solution. Open the cap only in a sterile environment (e.g., a clean bench) using aseptic technique. It is recommended to use the entire contents after opening; otherwise, aliquot into a suitable sterile container and store refrigerated (2~8°C).