MEM (Minimum Essential Medium, Eagle)

With Earle's Salts | With Sodium Bicarbonate | Without L-Glutamine | Without Phenol Red

Cat. No. CPM105 | Size: 500 ML / 1L

1. Product Description

MEM is a modification of BME developed by Harry Eagle, featuring enriched amino acids that serve as the basis for Alpha-MEM, DMEM, and others. MEM can be used for the cultivation of various cell types including HeLa, BHK21, 293, HT-1080, and MCF-7. MEM contains Earle's Salts for maintaining pH in a CO_2 incubator. This product (Cat. No. CPM105) does not contain L-glutamine, so it can be aseptically supplemented to a concentration of 2 mM if necessary. Additionally, since it does not contain phenol red, it can be used for cultures requiring phenol-red-free conditions.

2. Composition

Amino Acids	mg/L	Vitamins	mg/L	Inorganic Salts	mg/L
L-Arginine-HCl	126.0	D-Ca Pantothenate	1.0	$CaCl_2$	200.0
L-Cystine-2HCl	31.28	Choline Chloride	1.0	KCl	400.0
L-Glutamine	-	Folic Acid	1.0	$MgSO_4$	97.67
L-Histidine-HCl·H_2O	42.0	i-Inositol	2.0	NaCl	6800.0
L-Isoleucine	52.0	Niacinamide	1.0	$NaHCO_3$	2200.0
L-Leucine	52.0	Pyridoxal-HCl	1.0	$NaH_2PO_4·H_2O$	140.0
L-Lysine-HCl	72.5	Riboflavin	0.1	**Others**	
L-Methionine	15.0	Thiamine-HCl	1.0	D-Glucose	1000.0
L-Phenylalanine	32.0			HEPES	-
L-Threonine	48.0			Phenol Red	-
L-Tryptophan	10.0				
L-Tyrosine-2Na	51.9				
L-Valine	46.0				

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Light yellow clear liquid	pH 7.3 ± 0.3	285 ± 15 mOsm/kg H_2O	< 1 EU/ml	Sterile

4. Storage Conditions and Precautions

Store at refrigerated conditions (2~8°C) protected from direct light. The expiration date is indicated on the product label; do not use expired products. Product degradation during storage may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Storing attached to the inner wall of the refrigerator where the temperature is relatively low (0°C) may cause denaturation due to ice crystals, and addition of extra substances may also cause denaturation.

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 at refrigerated conditions (2~8°C).