

Product Name

Name: Minimum Essential Medium Eagle (MEM-E), with Earle's Salts and L-Glutamine

Cat. No.: C3050-0500

Size: 500 mL

Product Description

Minimum Essential Medium (MEM) is a modification of Basal Medium Eagle (BME). It was developed by Harry Eagle to meet the specific nutritional requirements of certain subtypes of HeLa cells and normal mammalian fibroblasts. MEM includes a higher concentration of amino acids so as to closely approximate the requirement for protein synthesis of cultured mammalian cells. MEM can be used either with Earle's salts or Hanks salts and can also be additionally supplemented with non-essential amino acids (NEAA). This medium can be further modified by eliminating calcium ions to facilitate the growth of cells in suspension cultures.

Composition

Ingredients	mg/L	Ingredients	mg/L
INORGANIC SALTS			
Calcium chloride dihydrate	265.000	Sodium chloride	6800.000
Magnesium sulphate anhydrous	97.720	Sodium dihydrogen phosphate anhydrous	122.000
Potassium chloride	400.000		
Amino Acids			
L-Arginine hydrochloride	126.000	L-Methionine	15.000
L-Cystine dihydrochloride	31.300	L-Phenylalanine	32.000
L-Glutamine	292.000	L-Threonine	48.000
L-Histidine hydrochloride monohydrate	42.000	L-Tryptophan	10.000
L-Isoleucine	52.000	L-Tyrosine disodium salt	51.900
L-Leucine	52.000	L-Valine	46.000
L-Lysine hydrochloride	72.500		
Vitamins			
Choline chloride	1.000	Pyridoxal hydrochloride	1.000
D-Ca-Pantothenate	1.000	Riboflavin	0.100
Folic acid	1.000	Thiamine hydrochloride	1.000
Nicotinamide	1.000	i-Inositol	2.000
OTHERS			
D-Glucose	1000.000	Sodium bicarbonate	2200.000
Phenol red sodium salt	11.000		

Storage and Stability

The product should be kept at **2 - 8°C**.

Shelf life: 12 months from date of manufacture.

Procedure

1. Take a bottle from the refrigerator at 2 - 8°C and read the label.
2. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
3. Pipette out appropriate volume using aseptic/sterile technique under a laminar-flow culture hood.
4. Add antibiotics or other nutrients if desired.

Quality Control

Minimum Essential Medium Eagle (MEM-E), with Earle's Salts and L-Glutamine is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.