

Product Name

Name: Minimum Essential Medium-Alpha, with L-Glutamine, without Phenol Red

Cat. No.: C3062-0500

Size: 500 mL

Product Description

Minimum Essential Medium Eagle (MEM-E) 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 Hank's salts and can also be additionally supplemented with non-essential amino acids (NEAA). This medium can be further modified by eliminating calcium to facilitate the growth of cells in suspension cultures.

It does not contain deoxyribonucleosides and ribonucleosides. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

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			
Glycine	50.000	L-Leucine	52.000
L-Alanine	25.000	L-Lysine hydrochloride	72.500
L-Arginine hydrochloride	126.000	L-Methionine	15.000
L-Asparagine monohydrate	50.000	L-Phenylalanine	32.000
L-Aspartic acid	30.000	L-Proline	40.000
L-Cysteine hydrochloride	100.000	L-Serine	25.000
L-Cystine dihydrochloride	31.300	L-Threonine	48.000
L-Glutamic acid	75.000	L-Tryptophan	10.000
L-Glutamine	292.000	L-Tyrosine Disodium Salt	51.900
L-Histidine hydrochloride monohydrate	42.000	L-Valine	46.000
L-Isoleucine	52.000		

Vitamins

Choline chloride	1.000	Pyridoxal hydrochloride	1.000
D-Biotin	0.100	Riboflavin	0.100
D-Ca-Pantothenate	1.000	Thiamine hydrochloride	1.000
Folic acid	1	Vitamin B12	1.360
L-Ascorbic acid	50.000	i-Inositol	2.000
Nicotinamide	1.000		

OTHERS

D-Glucose	1000.000	Sodium pyruvate	110.000
Lipoic acid	0.200	sodium bicarbonate	2200.000

Storage and Stability

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

The product is **light-sensitive** and therefore should not be left in the light.

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 the appropriate volume using an aseptic/sterile technique under a laminar-flow culture hood.
4. Add antibiotics or other nutrients if desired.

Quality Control

Minimum Essential Medium-Alpha, with L-Glutamine, without Phenol Red is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance using Vero cells.

Precaution and Disclaimer

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