

Minimum Essential Medium Eagle (MEM)

With Earle's salts, NEAA, L-Glutamine and Sodium bicarbonate

Without Phenol red

2X Liquid Cell Culture Medium

Product Code: AL178A

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 higher concentration of amino acids so as to closely approximate the protein composition 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 growth of cells in suspension cultures.

AL178A is Minimum Essential Medium Eagle with Earle's salts, NEAA, L-glutamine and sodium bicarbonate. It does not contain phenol red. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition :

| Ingredients | mg/L |
|---------------------------------------|-----------|
| INORGANIC SALTS | |
| Calcium chloride dihydrate | 530.000 |
| Magnesium sulphate anhydrous | 195.440 |
| Potassium chloride | 800.000 |
| Sodium bicarbonate | 4400.000 |
| Sodium chloride | 13600.000 |
| Sodium dihydrogen phosphate anhydrous | 244.000 |
| AMINO ACIDS | |
| Glycine | 15.000 |
| L-Alanine | 17.800 |
| L-Arginine hydrochloride | 252.000 |
| L-Asparagine monohydrate | 30.000 |
| L-Aspartic acid | 26.600 |
| L-Cystine dihydrochloride | 62.600 |
| L-Glutamic acid | 29.400 |
| L-Glutamine | 584.000 |
| L-Histidine hydrochloride monohydrate | 84.000 |
| L-Isoleucine | 104.000 |

| | |
|--------------------------|----------|
| L-Leucine | 104.000 |
| L-Lysine hydrochloride | 145.000 |
| L-Methionine | 30.000 |
| L-Phenylalanine | 64.000 |
| L-Proline | 23.000 |
| L-Serine | 21.000 |
| L-Threonine | 96.000 |
| L-Tryptophan | 20.000 |
| L-Tyrosine disodium salt | 103.800 |
| L-Valine | 92.000 |
| VITAMINS | |
| Choline chloride | 2.000 |
| D-Ca-Pantothenate | 2.000 |
| Folic acid | 2.000 |
| Nicotinamide | 2.000 |
| Pyridoxal hydrochloride | 2.000 |
| Riboflavin | 0.200 |
| Thiamine hydrochloride | 2.000 |
| i-Inositol | 4.000 |
| OTHERS | |
| D-Glucose | 2000.000 |

Quality Control:

Appearance

Clear, colourless solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

590.00 -630.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through minimum three subcultures.

Endotoxin Content

NMT 5EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light.

Shelf life is 12 months.

Use before expiry date given on the product label.

Revision : 1 / 2011

Disclaimer :

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