Minimum Essential Medium Eagle (MEM)

With Earle's salts, L-Glutamine, Sodium bicarbonate
Without NEAA
2X Liquid Cell Culture Medium

Product Code: AL259A

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.

AL259A is a 2X Minimum Essential Medium Eagle with Earle's salts, L-glutamine and sodium bicarbonate. It does not contain non-essential amino acids. 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	195.44
Potassium chloride	800.000
Sodium bicarbonate	4400.000
Sodium chloride	13600.00
Sodium dihydrogen phosphate anhydrous	244.000
AMINO ACIDS	
L-Arginine hydrochloride	252.000
L-Cystine dihydrochloride	62.600
L-Glutamine	584.000
L-Histidine hydrochloride monohydrate	84.000
L-Isoleucine	104.00
L-Leucine	104.00
L-Lysine hydrochloride	145.00
L-Methionine	30.000
L-Phenylalanine	64.000
L-Threonine	96.000
L-Tryptophan	20.000
L-Tyrosine disodium salt	103.80
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
Phenol red sodium salt	22.000

Quality Control:

Appearance
Orangish red colored, clear solution.

pH
Value

Osmolality in mOsm/Kg H2O
Value

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.

Endotoxin content
NMT 1EU/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.

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