



Minimum Essential Medium Eagle (MEM)

(Joklik modification) (For Suspension Culture)

With Sodium bicarbonate

Without L-Glutamine

Product Code: AL079

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 Hanks' 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.

AL079 is Joklik modification of Minimum Essential Medium with sodium bicarbonate. It does not contain L-glutamine. This medium is designed for use with suspension cells, hence does not contain calcium. 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	
Magnesium chloride	93.680
Potassium chloride	400.000
Sodium bicarbonate	2000.000
Sodium chloride	6500.000
Sodium dihydrogen phosphate	1154.000
AMINO ACIDS	
L-Arginine hydrochloride	126.000
L-Cystine dihydrochloride	32.400
L-Glutamine	292.000
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	52.000
L-Leucine	52.000
L-Lysine hydrochloride	72.500
L-Methionine	15.000

L-Phenylalanine	32.000
L-Threonine	48.000
L-Tryptophan	10.000
L-Tyrosine disodium salt dihydrate	54.500
L-Valine	46.000
VITAMINS	
Choline chloride	1.000
D-Ca-Pantothenate	1.000
Folic acid	1.000
Nicotinamide	1.000
Pyridoxal hydrochloride	1.000
Riboflavin	0.100
Thiamine hydrochloride	1.000
i-Inositol	2.000
OTHERS	
D-Glucose	2000.000
Phenol red sodium salt	11.000

Directions:

1. Add 10ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012)

Quality Control:

Appearance

Orangish red colored, clear solution

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

280.00 -320.00

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.

Endotoxin Content

NMT 1EU/ml

Storage and Shelf Life:

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

Shelf life is 18 months.

Use before expiry date given on the product label.

Disclaimer :

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