Minimum Essential Medium Eagle (MEM)
(Joklik modification) (For Suspension Culture)
With Sodium bicarbonate
Without L-Glutamine
1X Liquid cell Culture Medium

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 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.

AL079 is Joklik modification of Minimum Essential Medium with sodium bicarbonate. It does not contain calcium chloride and 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 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 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 18 months.
Use before expiry date given on the product label.

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