

Technical Information

Dulbecco's Modified Eagle Medium (DMEM), High glucose
With 4.5gms Glucose per liter, L-Glutamine, Sodium bicarbonate and Sodium pyruvate
Without Folic acid

Product Code: AL1007F

Application:- Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modification of Eagle's medium. DMEM is a modification of Basal Medium Eagle (BME) that contains four fold concentration of amino acids and vitamins. Additionally, the formulation also includes glycine, serine and ferric nitrate. The original formulation contains 1000mg/L of glucose and was originally used to culture embryonic mouse cells. DMEM high glucose is a further modification of original DMEM and contains 4500mg/L of glucose. The additional glucose has proved to be useful in cultivating various other cell lines including primary cultures of mouse and chicken cells as well as various normal and transformed cell lines. AL1007F is Dulbecco's Modified Eagle Medium with 4.5gms glucose per litre, L-glutamine, sodium bicarbonate and sodium pyruvate. It does not contain folic acid. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition**

Ingredients	mg/Litre
INORGANIC SALTS	
Calcium chloride dehydrate	265.000
Ferric nitrate nonahydrate	0.100
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	3700.000
Sodium chloride	6400.000
Sodium dihydrogen phosphate anhydrous	109.000
Sodium phosphate monobasic anhydrous	109.000
AMINO ACIDS	
Glycine	30.000
L-Arginine hydrochloride	84.000
L-Cystine dihydrochloride	62.570
L-Glutamine	584.000
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	105.000
L-Leucine	105.000
L-Lysine hydrochloride	146.000
L-Methionine	30.000
L-Phenylalanine	66.000
L-Serine	42.000
L-Threonine	95.000
L-Tryptophan	16.000
L-Tyrosine disodium salt	103.790
L-Valine	94.000
VITAMINS	
Choline chloride	4.000
D-Ca-Pantothenate	4.000

Nicotinamide	4.000
Pyridoxal hydrochloride	4.000
Riboflavin	0.400
Thiamine hydrochloride	4.000
i-Inositol	7.200
OTHERS	
D-Glucose	4500.000
Phenol red sodium salt	15.900
Sodium pyruvate	110.000

Quality control

Appearance

Red colored, clear solution

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

320.00 -360.00

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 12 months. Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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