

Dulbecco's Modified Eagle Medium (DMEM)

With 4.5gms Glucose per litre, 1mM Sodium pyruvate, L-Glutamine, 1.5gms per litre of Sodium bicarbonate
1X Liquid Cell Culture Medium

Product Code: AL007S

Product Description :

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 1000 mg/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.

AL007S is Dulbecco's Modified Eagle Medium with 4.5gms glucose per litre, L-glutamine, 1.5gms per litre sodium bicarbonate and 1mM sodium pyruvate. 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	265.000
Ferric nitrate nonahydrate	0.100
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	1500.000
Sodium chloride	6400.000
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
Folic acid	4.000
Nicotinamide	4.000
Pyridoxal 5 phosphate	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

Orangish red colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

285.00 -325.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation as per 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 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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