

Technical Information

Dulbecco's Modified Eagle Medium (DMEM), High glucose

With 4.5gms Glucose per liter, 1mM Sodium pyruvate, L-Glutamine and 1.5 gms per liter Sodium bicarbonate Without Phenol red

Product Code: AL1101S

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 1000mgs/L of glucose and was originally used to culture embryonic mouse cells. DMEM high glucose is a further modification of original DMEM and contains 4500mgs/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.

AL1101A is Dulbecco's Modified Eagle Medium with 4.5gms glucose per liter, L-glutamine, sodium pyruvate and sodium bicarbonate. It does not contain phenol red. 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 dihydrate	265.000
Ferric nitrate nonahydrate	0.100
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	1500.00
Sodium chloride	6400.000
Sodium dihydrogen phosphate anhydrous	109.000
AMINO ACIDS	
Glycine	30.000
L-Arginine hydrochloride	84.000
L-Cystine dihydrochloride	62.570
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	105.00
L-Glutamine	584.00
L-Leucine	105.00
L-Lysine hydrochloride	146.00
L-Methionine	30.000
L-Phenylalanine	66.000
L-Serine	42.000
L-Threonine	95.000
L-Tryptophan	16.000
L-Tyrosine disodium salt dihydrate	103.790
L-Valine	94.000

VITAMINS

Choline chloride	4.000
D-Ca-Pantothenate	4.000
Folic acid	4.000
Nicotinamide	4.000
Pyridoxine hydrochloride	4.000
Riboflavin	0.400
Thiamine hydrochloride	4.000
i-Inositol	7.200

OTHERS

D-Glucose	4500.00
Sodium pyruvate	110.000

Quality control

Appearance

Yellow coloured, clear solution

pH

7.0 -7.6

Osmolality in mOsm/Kg H₂O

310.0 -350.00

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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