

Technical Information

Dulbecco's Modified Eagle Medium (DMEM), High Glucose, 2X

With 9.0gms Glucose per litre and L-Glutamine Without Sodium pyruvate and Sodium bicarbonate

Product Code: AL1294A

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. AL294A is 2X Dulbecco's Modified Eagle Medium with 9.0gms Glucose per litre and L-Glutamine. It does not contain Sodium bicarbonate and 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/Litre
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INORGANIC SALTS

Calcium chloride dihydrate	530.000
Ferric nitrate nonahydrate	0.200
Magnesium sulphate anhydrous	195.44
Potassium chloride	800.000
Sodium chloride	12800.00
Sodium dihydrogen phosphate anhydrous	218.00

AMINO ACIDS

Glycine	60.000
L-Arginine hydrochloride	168.000
L-Cystine dihydrochloride	125.14
L-Glutamine	1168.00
L-Histidine hydrochloride monohydrate	84.000
L-Isoleucine	210.00
L-Leucine	210.00
L-Lysine hydrochloride	292.000
L-Methionine	60.000
L-Phenylalanine	132.000
L-Serine	84.000
L-Threonine	190.000
L-Tryptophan	32.000
L-Tyrosine sodium salt	207.580
L-Valine	188.000

VITAMINS

Choline chloride	8.000
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D-Ca-Pantothenate	8.000
Folic acid	8.000
Nicotinamide	8.000
Pyridoxal hydrochloride	8.000
Riboflavin	0.800
Thiamine hydrochloride	8.000
i-Inositol	14.40
OTHERS	
D-Glucose	9000.000
Phenol red sodium salt	31.800

Quality control

Appearance :

Reddish orange colored, clear solution

pH :

7.00 - 7.60

Osmolality in mOsm/Kg H₂O:-

500.00 - 540.00

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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