



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

**With 4.5gms Glucose per litre and Sodium bicarbonate
Without L-Glutamine and Sodium pyruvate**

Product Code: AL066

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 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.

AL066 is DMEM with 4.5gms of glucose per litre and sodium bicarbonate. It does not contain L-glutamine 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/L |
|---------------------------------------|----------|
| INORGANIC SALTS | |
| Calcium chloride dihydrate | 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 |
| AMINO ACIDS | |
| Glycine | 30.000 |
| L-Arginine hydrochloride | 84.000 |
| L-Cystine dihydrochloride | 62.570 |
| 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 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 |

Directions:

1. Add 20ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012)

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 18 months.

Use before expiry date given on the product label.

Disclaimer :

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