

Rev.ver: 01

1. Identification

Product name	Dulbecco's Modified Eagle Medium (DMEM), Low glucose w/1gm Glucose per liter,L-Glutamine, 25mM HEPES buffer, Sodium bicarbonate and Sodium pyruvate
Catalog.no	CCML012

2. Description

Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modifications 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. 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. Dulbecco's Modified Eagle Medium with 1gm glucose per liter,L-Glutamine,25mM HEPES buffer, 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.

3. Product Specifications

Appearance	Orangish red colored, clear solution
CO ₂ concentration, optimum	5.0 %
Storage and shelf life	Store at +2°C to +8°C protected from light. Once opened, store at 4°C and use within 6-8 weeks.
Shipping conditions	Ambient

4. Formulation

Components	Concentration mg/L
Amino Acids:	
L-Arginine HCl	84.00
L-Cystine 2HCl	62.57
Glycine	30.00
L-Histidine HCl H ₂ O	42.00
L-Glutamine	584.000
L-Isoleucine	105.00
L-Leucine	105.00
L-Lysine HCl	146.00
L-Methionine	30.00
L-Phenylalanine	66.00
L-Serine	42.00
L-Threonine	95.00
L-Tryptophan	16.00
L-Tyrosine 2Na 2H ₂ O	103.79
L-Valine	94.00
Vitamins:	
Choline chloride	4.000
D-Calcium Pantothenate	4.00

Components	Concentration mg/L
Folic Acid	4.00
Nicotinamide	4.00
Riboflavin	0.400
Pyridoxal HCl	4.00
i-Inositol	7.20
Thiamine HCl	4.00
Inorganic Salts	
CaCl ₂ .2H ₂ O	265.000
Fe(NO ₃) ₃ .9H ₂ O	0.10
KCl	400.000
MgSO ₄ ,Anhydrous	97.720
Sodium chloride	6400.000
NaHCO ₃	3700.00
Sodium dihydrogen phosphate anhydrous	109.000
Other Components:	
D-Glucose	1000.000
HEPES buffer	5958.000
Phenol Red Sodium Salt	15.90
Sodium pyruvate	110.000

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.