

Dulbecco's Modified Eagle's Medium (DMEM)

Cat. No.	Pack Size
MTE0348	500 ml

For *in vitro* use only

Reagent Composition:

- 4500 mg / litre of D-glucose, anhydrous
- 584 mg / litre L-glutamine,
- 15 mg / litre Phenol Red

Applications:

Dulbecco's Modified Eagle's Medium (DMEM) is a basic cell culture medium used for a broad spectrum of applications. **DMEM** is suitable for cultivation of most cell types.

- Usage is recommended with supplementation of 10% FBS. Through supplementation with vitamins, amino acids, cell growth factors, cytokines, and serum, this medium can be adapted for optimal culture of certain cell types.

Description:

DMEM is the most widely used modification of BME (Basal Medium Eagle). It contains a four-fold higher concentration of amino acids and vitamins. Non-essential amino acids and certain essential trace elements were added. The bicarbonate concentration was increased. **DMEM** was originally developed for the culture of mice embryonic cells. Today, it finds a broad application of serum-free culture of normal and transformed mouse and chicken cells.

Formulation

Formulation	mg / litre
Inorganic Salts	
Calcium Chloride, anhydrous	200.00
Ferric(III)-Nitrate • 9H ₂ O	0.10
Potassium Chloride	400.00
Magnesium Sulphate anhydrous	97.70
Sodium Chloride	6400.00
Sodium Dihydrogen Phosphate • H ₂ O	125.00
Sodium Hydrogen Carbonate	3700.00
Amino Acids	
L-Arginine • HCl	84.00
L-Cystine	48.00
L-Glutamine	584.00
Glycine	30.00
L-Histidine • HCl • H ₂ O	42.00
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	72.00
L-Valine	94.00

Formulation (continued)

Formulation	mg / litre
Vitamins	
D-Calcium-Pantothenate	4.00
Choline Chloride	4.00
Folic Acid	4.00
Myo-Inositol	7.20
Nicotinamide	4.00
Pyridoxal • HCl	4.00
Riboflavin	0.40
Thiamine • HCl	4.00
Other Components	
D-Glucose anhydrous	4500.00
Phenol Red	15.00
Sodium Pyruvate	110.00

pH: 6.8 – 7.5

Storage: +2°C to +8°C

Cell culture: Tested

Sterility: Tested

Safety warnings and precautions:

Only persons trained in laboratory techniques should handle this product and its components. It is advisable to wear suitable protective clothing, such as laboratory overalls, gloves and safety glasses. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

Some applications this product is used in may require a license, which is not provided by the purchase of this product. Users should obtain the license if required.

Related products:

Cat. No.	Product	Pack Size
MTE0347	IMDM , (wo L-Glutamine, w 25mM HEPES, wo sodium hydrogen pyruvate)	500 ml
MTE0349	Ham's F12 , (w L-Glutamine, wo sodium hydrogen pyruvate)	500 ml
MTE0350	Glasgow-MEM , (w L-Glutamine, wo Tryptose/Phosphate-Boullion, wo sodium hydrogen pyruvate)	500 ml
MTE0352	Penicillin/Streptomycin (10000IU/10000 ug/ml,100x)	100 ml
MTE0353	L-Glutamine 200mM	100 ml
MTE0354	Cell freezing mix (FCS/DMSO)	50 ml
MTE0355	NEA (Non-essential amino acids)	100 ml
MTE0356	Sodium Pyruvate 100mM	100 ml
MTE0357	1X PBS (without Ca ⁺² , Mg ⁺²)	500 ml
MTE0358	Trypsin/EDTA (0.05% / 0.02% in PBS)	100 ml