

DMEM, High Glucose, GlutaPlus, HEPES, no Sodium Pyruvate

Cat. No.: G4512

Product Information

Product Name	Cat. No.	Spec.
DMEM, High Glucose, GlutaPlus, HEPES, no Sodium Pyruvate	G4512-500ML	500 mL

Product Description

Dulbecco's Modified Eagle Medium (DMEM), is a modified medium based on MEM, is a widely used basal medium for supporting the growth of many different mammalian cells. Cells successfully cultured in DMEM include primary fibroblasts, neurons, glial cells, HUVECs, and smooth muscle cells, as well as cell lines such as HeLa, 293, Cos-7, and PC-12.

This product contains amino acids, vitamins, inorganic salts and other ingredients required for cell culture, without protein or growth factors. Need to add 5-10% serum or serum-free additives depending on the cell type.

This product is sterilized by 0.1 μ m filter membrane, pH 7.0-7.4, contains 25 mM D-glucose, 4.0 mM GlutaPlus, phenol red indicator and HEPES buffer system, no sodium pyruvate.

GlutaPlus, L-alanyl-L-glutamine, is a cell culture additive that replaces medium moles of L-glutamine in cell culture media. The substance is stable in aqueous solution and does not degrade spontaneously. Instead, it is slowly degraded by a peptidase secreted by cells to release glutamine, which is then taken up and used by cells.

HEPES is an excellent biological buffering agent with no toxic effect on cells. The medium supplemented with HEPES can maintain a constant pH range for a long time.

Storage and Shipping Conditions

Ship at room temperature; Store away from light at 2-8°C, valid for 12 months.

Note

1. This product has been filtered and sterilized. Attention should be paid to aseptic operation to avoid contamination.
2. Avoid freezing the culture medium. Freezing may cause precipitation and precipitation of nutrients, which may not be completely dissolved after rewarming, affecting the cell culture effect. In addition, when the medium is stored at 2-8°C, do not store it completely close to the inner wall of the refrigerator to prevent the medium from freezing due to localized low temperature.
3. For your safety and health, please wear safety glasses, gloves and protective clothing.

For Research Use Only!

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G4512 DMEM (High Glucose) Medium Formula

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	30	0.4	Calcium Chloride (CaCl ₂) (anhyd.)	200	1.80
L-Arginine hydrochloride	84	0.4	Ferric nitrate nonahydrate (Fe(NO ₃) ₃ • 9H ₂ O)	0.1	0.0002
L-Cystine dihydrochloride	62.6	0.2	Magnesium Sulfate (MgSO ₄) (anhyd.)	97.67	0.80
L-Histidine hydrochloride-H ₂ O	42	0.2	Potassium Chloride (KCl)	400	5.36
L-Isoleucine	105	0.8	Sodium Bicarbonate (NaHCO ₃)	3700	44.04
L-Leucine	105	0.80	Sodium Chloride (NaCl)	4750	81.9
L-Lysine hydrochloride	146	0.8	Sodium Phosphate monobasic (NaH ₂ PO ₄) (anhyd.)	108.7	0.906
L-Methionine	30	0.2	Other components		
L-Phenylalanine	66	0.4	D-Glucose (Dextrose)	4500	24.98
L-Serine	42	0.4	Sodium pyruvate	–	–
L-Threonine	95	0.8	HEPES	5958	25
L-Tryptophan	16	0.08	Phenol Red	14.95	0.0422
L-Tyrosine disodium salt dihydrate	103.7	0.4			
	9				
L-Valine	94	0.8			
L-Glutamine	–	–			
L-Alanyl-L-Glutamine	869	4.0			
Vitamins					
Choline chloride	4.0	0.0286			
D-Calcium pantothenate	4.0	0.0084			
Folic Acid	4.0	0.0091			
Niacinamide	4.0	0.0328			
Pyridoxine hydrochloride	4.0	0.0195			
Riboflavin	0.4	0.0011			
Thiamine hydrochloride	4.0	0.0119			
i-Inositol	7.2	0.0389			