

Eagle' s MEM (EMEM)

Cat. No.:G4650

Product Information

Product Name	Cat. No.	Spec.
Eagle' s MEM (EMEM)	G4650-500ML	500 mL

Product Description

Eagle's MEM (EMEM) medium, Eagle's Minimum Essential Medium, also known as minimum essential medium, minimum basic medium or low limit Eagle medium, is developed on the basis of Eagle basic medium (BEM). It is one of the most basic and widely used animal cell medium, hereinafter referred to as EMEM. EMEM medium contains only 12 essential amino acids, glutamine and 8 vitamins, the composition is simple, mainly used for the culture of adherent cells, and can also be used for other types of cell culture after modification.

This product can be used to culture a variety of monolingual mammalian cells, such as cultured cell lines such as HeLa, BHK-21, 293, HEP-2, HT-1080, MCF-7, fibroblasts and primary rat astrocytes. It can also be used to select negative cells transfected with DHFR.

EMEM medium added seven non-essential amino acids (NEAA) including L-alanine, L-glutamic acid, L-asparagine, L-aspartate, L-proline, L-serine and glycine on the basis of MEM medium, which could reduce the side effects of cell production of non-essential amino acids during cell culture and effectively promote cell proliferation and metabolism.

In addition, on the basis of conventional EMEM medium, the content of sodium bicarbonate was reduced and sodium pyruvate was added. This product contains amino acids, vitamins, inorganic salts and other components required for cell culture, and does not contain protein or growth factors. It needs to be used with 5-10% serum or no serum additives according to cell type.

This product is filtered by 0.1 μ m filter membrane, pH 7.0-7.4, adding 2.0 mL-alanyl-L-glutamine, 1.0 mM sodium pyruvate, containing 1.5 g/L sodium bicarbonate, containing phenol red indicator, without HEPES buffer system.

L-alanyl-L-glutamine is a cell culture additive that can replace medium molar L-glutamine in cell medium. The substance is very stable in aqueous solution and does not degrade spontaneously, but is slowly degraded by a peptidase secreted by cells to release glutamine, which is then absorbed and used by cells.

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. For best results, do not freeze and thaw repeatedly.
3. For your safety and health, please wear safety glasses, gloves or protective clothing.

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4650 Eagle's MEM (EMEM)					
Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Vitamins		
L-Arginine	125.8	0.5972	Choline chloride	1	0.007143
L-Cystine 2HCl	31.2	0.09968	D-Calcium pantothenate	1	0.002096
L-Alanyl-L-Glutamine	434.4	2	Folic Acid	1	0.002268
L-Histidine hydrochloride-H ₂ O	41.9	0.1995	Niacinamide	1	0.008197
L-Isoleucine	52.5	0.3969	Pyridoxine hydrochloride	1	0.004902
L-Leucine	52.5	0.3969	Riboflavin	0.1	0.000266
L-Lysine hydrochloride	72.5	0.3961	Thiamine hydrochloride	1	0.002967
L-Methionine	15	0.1007	Meso-Inositol	2	0.01111
L-Phenylalanine	32.5	0.197	Inorganic salts		
L-Threonine	47.8	0.4017	Calcium Chloride (CaCl ₂) (anhyd.)	200	1.8018
L-Tryptophan	10	0.04902	Magnesium Sulfate (MgSO ₄) (anhyd.)	97.67	0.8139
L-Tyrosine disodium salt dihydrate dihydrate	51.9	0.1988	Potassium Chloride (KCl)	400	5.333
L-Valine	46.8	0.4	Sodium Bicarbonate (NaHCO ₃)	1500	17.857
Glycine	7.5	0.1	Sodium Chloride (NaCl)	6800	117.24
L-Alanine	8.9	0.1	Sodium Phosphate monobasic (NaH ₂ PO ₄) (anhyd.)	122	1.0144
L-Asparagine	15	0.1136	Other components		
L-Aspartic Acid	13.3	0.1	D-Glucose (Dextrose)	1000	5.5556
L-Glutamic Acid	14.7	0.1	Phenol Red	9.4	0.02657
L-Proline	11.5	0.1	Sodium pyruvate	110	1
L-Serine	10.5	0.1			