

MEM, NEAA, GlutaPlus, HEPES

Cat. No.: G4551

Product Information

Product Name	Cat. No.	Spec.
MEM, NEAA, GlutaPlus, HEPES	G4551-500ML	500 mL

Product Description

Minimum Essential Medium (MEM), which is also known as Low Limited Eagle Medium, is one of the most commonly used basic media in animal cell culture. MEM contains only 12 kinds of essential amino acids, 8 kinds of vitamins and basic inorganic salts, and has simple nutritional composition. It is mainly used for culture of adherent cells, and can also be used for culture of other types of cells culture with a modified formulation.

MEM containing NEAA (non-essential amino acids) is supplemented with seven kinds of NEAA, including L-alanine, L-glutamic acid, L-asparagine, L-aspartate, L-proline, L-serine and glycine, which can reduce the side effects of non-essential amino acid synthesis by cells during cell culture and effectively promote cell proliferation and metabolism.

This product contains amino acids, vitamins, inorganic salts and other ingredients required for cell culture, and does not contain protein or growth factors. 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 5.5 mM D-glucose and non-essential amino acids, 1.87 mM L-Alanyl-L-Glutamine, phenol red indicator, 25 mM HEPES buffer system, no sodium pyruvate.

HEPES is a commonly used biological buffering agent, which can keep the medium at a constant pH range for a long time and effectively prevent the adverse effects of large pH fluctuations on cell growth.

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 and protective clothing.

For Research Use Only!

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G4551 MEM, with NEAA, HEPES					
Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
L-Arginine hydrochloride	126	0.5972	Calcium Chloride (CaCl ₂) (anhyd.)	200	1.802
L-Cystine 2HCl	31	0.09904	Magnesium Sulfate (MgSO ₄) (anhyd.)	200	0.813
L-Alanyl-L-Glutamine	406.2	1.87	Potassium Chloride (KCl)	400	5.333
L-Histidine hydrochloride-H ₂ O	42	0.2	Sodium Bicarbonate (NaHCO ₃)	2200	26.19
L-Isoleucine	52	0.3969	Sodium Chloride (NaCl)	6350	109.5
L-Leucine	52	0.3969	Sodium Phosphate monobasic (NaH ₂ PO ₄) (anhyd.)	122	1.014
L-Lysine hydrochloride	73	0.3989	Other components		
L-Methionine	15	0.1007	D-Glucose (Dextrose)	1000	5.556
L-Phenylalanine	32	0.1939	Phenol Red	9.4	0.02657
L-Threonine	48	0.4034	HEPES	5958	25.03
L-Tryptophan	10	0.04902			
L-Tyrosine disodium salt dihydrate	52	0.1992			
L-Valine	46	0.3932			
Glycine	8	0.1067			
L-Alanine	9	0.1011			
L-Asparagine monohydrate	14.8	0.09848			

L-Asparagic acid	13	0.09774
L-Aminoglutaric acid	15	0.102
L-Proline	12	0.1043
L-Serine	11	0.1048
Vitamins		
Choline chloride	1	0.007143
D-Calcium pantothenate	1	0.002096
Folic Acid	1	0.002268
Niacinamide	1	0.008197
Pyridoxine hydrochloride	1	0.004902
Riboflavin	0.1	0.000266
Thiamine hydrochloride	1	0.002967
i-Inositol	2	0.01111