

M199,GlutaPlus

Cat. No.: G4620

Product Information

Product Name	Cat. No.	Spec.
M199,GlutaPlus	G4620-500ML	500 mL

Product Description/Introduction

M199, known as Medium 199, was originally designed for the culture of chicken embryo fibroblasts and is now widely used for the culture of various animal cells, including non-mammalian cells. Compared to other basal medium, M199 contains a number of unique components, including adenine, adenosine, hypoxanthine, thymine and other vitamins. Different balanced salt solution can be used, for example Earle' s Balanced Salts Solution for CO₂ environments and Hank' s Balanced Salts Solution for non-CO₂ environments. M199 is especially suitable for the culture of non-transformed cells and is also commonly used for virology, rat pancreatic epithelial cells and mouse lens tissue.

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

This product is sterilized by 0.1μm filter membrane, pH 7.0-7.4, contains Earle' s Balanced Salts Solution, 1000 mg/L D-glucose, L-alanyl-L-glutamine.

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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G4620 M199 Formula

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	50.0	0.6667	Calcium Chloride (CaCl ₂)(anhyd.)	200.0	1.802
L-Alanine	25.0	0.2809	Ferric Nitrate (Fe(NO ₃) ₃ • 9H ₂ O)	0.7	0.001733
L-Arginine hydrochloride	70.0	0.3318	Magnesium Sulfate (MgSO ₄) (anhyd.)	97.7	0.8139
L-Asparagine acid	30.0	0.2256	Potassium Chloride (KCl)	400.0	5.333
L-Cysteine hydrochloride • H ₂ O	0.10	0.0006	Sodium Bicarbonate(NaHCO ₃)	2200.0	26.190
L-Cystine 2HCl	33.9	0.1083	Sodium chloride (NaCl)	6800.0	117.24
L-Glutamic acid	75.0	0.5102	Sodium dihydrogen phosphate(NaH ₂ PO ₄)(anhyd.)	121.7	1.014
L-Alanyl-L-Glutamine	148.8	0.6849	Other components		
L-Histidine hydrochloride • H ₂ O	21.9	0.1042	D-Glucose (Dextrose)	1000.0	5.556
L-Hydroxyproline	10.0	0.0763	Phenol Red	18.83	0.053135
L-Isoleucine	40.0	0.3053	Cholesterol	0.20	0.00051680
L-Leucine	60.0	0.4580	Glutathione (reduced)	0.05	0.00016287
L-Lysine hydrochloride	70.0	0.3825	Sodium Acetate	50.0	0.60976
L-Methionine	15.0	0.1007	Tween 80	20	-
L-Phenylalanine	25.0	0.1515	Hypoxanthine Na	0.40	0.0029412
L-Proline	40.0	0.3478	2-deoxy-D-ribose	0.50	0.003731
L-Serine	25.0	0.2381	Adenine sulfate	5.772	0.024752
L-Threonine	30.0	0.2521	Adenosine 5' -phosphate	0.211	0.0005764
L-Tryptophan	10.0	0.0490	Adenosine 5' -triphosphate	0.911	0.0016529
L-Tyrosine disodium salt dihydrate	58.0	0.2222	Guanine hydrochloride	0.30	0.00159574
L-Valine	25.0	0.2137	Ribose	0.50	0.0033333
Vitamins			Thymine	0.30	0.0023810
Ascorbic Acid	0.050	0.0002841	Uracil	0.30	0.002679
Biotin	0.010	0.0000410	Xanthine-Na	0.34	0.002237
Choline chloride	0.50	0.003571			
D-Calcium pantothenate	0.010	0.0000210			
Folic Acid	0.010	0.0000227			
Menadione (Vitamin K3)	0.01606	0.00005814			
Niacinamide	0.0250	0.0002049			
Nicotinic Acid (Niacin)	0.0250	0.0002033			
Para-Aminobenzoic Acid	0.0500	0.0003650			
Pyridoxal hydrochloride	0.0250	0.0001225			
Pyridoxine hydrochloride	0.0250	0.0001214			
Riboflavin	0.0100	0.00002660			
Thiamine hydrochloride	0.0100	0.00002967			