

RPMI-1640 Medium, GlutaPlus, HEPES, Sodium Pyruvate

Cat. No.: G4535

Product Information

Product Name	Cat. No.	Spec.
RPMI-1640 Medium, GlutaPlus, HEPES, Sodium Pyruvate	G4535-500ML	500 mL

Product Description/Introduction

The RPMI in RPMI-1640 is an acronym for Roswell Park Memorial Institute, which stands for the Roswell Park Memorial Institute, and RPMI-1640 is a cell culture medium developed by the institute. Originally designed specifically for lymphocyte culture, this medium is now widely used for the culture of various normal and cancer cells, especially suspension cells, and is one of the most widely used media.

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 filtered and sterilized by 0.1 μ m filter membrane, pH 7.0-7.4, contains 11.1 mM D-glucose, 2.05 mM L-Alanyl-L-Glutamine, phenol red indicator, HEPES and sodium pyruvate.

L-Alanyl-L-Glutamine is a cell culture additive, replaces the equivalent molar amount of L-glutamine in cell culture medium. It is very stable in aqueous solution and does not degrade spontaneously. Instead, it is slowly degraded to release glutamine through the peptidase secreted by cells, then absorbed and utilized by cells.

HEPES is an excellent biological buffer with no toxic effect on cells, and the medium with HEPES can maintain a constant pH range for a longer period of 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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G4535 RPMI-1640 Formula

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	10	0.133	Calcium nitrate ($\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$)	100	0.4237
L-Arginine hydrochloride	241.86	1.149	Magnesium Sulfate (MgSO_4) (anhyd.)	48.84	0.407
L-Asparagine hydrate	56.82	0.379	Potassium Chloride (KCl)	400	5.33
L-Aspartic Acid	20	0.15	Sodium Bicarbonate (NaHCO_3)	2000	23.8
L-Cystine dihydrochloride	65.2	0.208	Sodium Chloride (NaCl)	5300	90.6
L-Glutamic Acid	20	0.136	Sodium Phosphate monobasic (NaH_2PO_4) (anhyd.)	800	5.63
L-Histidine HCl H_2O	20.22	0.097	Other components		
L-Hydroxyproline	20	0.153	D-Glucose (Dextrose)	2000	11.11
L-Isoleucine	50	0.382	Sodium pyruvate	110	1
L-Leucine	50	0.382	Glutathione (reduced)	1	0.003
L-Lysine hydrochloride	40	0.219	HEPES	5958	25
L-Methionine	15	0.101	Phenol Red	4.6	0.013
L-Phenylalanine	15	0.091			
L-Proline	20	0.174			
L-Serine	30	0.286			
L-Threonine	20	0.168			
L-Tryptophan	5	0.025			
L-Tyrosine Disodium Salt Dihydrate	28.83	0.111			
L-Valine	20	0.171			
L-Alanyl-L-Glutamine	446	2.055			
Vitamins					
Biotin	0.2	0.00082			
Choline chloride	3	0.02143			
D-Calcium pantothenate	0.25	0.00052			

Folic Acid	1	0.00227
Niacinamide	1	0.0082
Para-Aminobenzoic Acid	1	0.0073
Pyridoxine hydrochloride	1	0.00485
Riboflavin	0.2	0.00053
Thiamine hydrochloride	1	0.00297
Vitamin B12	0.005	0.00000369
i-Inositol	35	0.19444
