

Ham' s F-12K, no Phenol Red

Cat. No.: G4591

Product Information

Product Name	Cat. No.	Spec.
Ham' s F-12K, no Phenol Red	G4591-500ML	500 mL

Product Description/Introduction

Ham's F-12K medium is a Kaighn's modification of Ham's F-12 nutrient mixture, originally designed for culturing primary human hepatocytes and differentiated rat and chicken cells under low serum conditions. Ham's F -12K increases the concentration of amino acids and sodium pyruvate, decreases the glucose content, and modifies the composition and content of inorganic salts from the original Ham's F-12. Compared with other culture media, Ham's F-12K contains many unique ingredients such as putrescine, thymine, hypoxanthine, zinc, etc., in addition to a higher content of sodium pyruvate.

This product contains amino acids, vitamins, inorganic salts and other ingredients required for cell culture, without protein or growth factors. Need to add 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 7.0 mM D-Glucose, L-Alanyl-L-Glutamine and 2.0 mM sodium pyruvate, no phenol red indicator, no HEPES buffer system.

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!

Ver. No.: V1.1-20260531

G4591 Ham's F-12K Formula

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	15.0	0.2	Potassium Chloride (KCl)	285.0	3.800
L-Alanine	18.0	0.2022	Sodium Bicarbonate (NaHCO ₃)	2500.0	29.76
L-Arginine hydrochloride	422.0	2.0	Sodium Chloride (NaCl)	7530.0	129.9
L-Asparagine-H ₂ O	30.0	0.2	Dibasic sodium phosphate (Na ₂ HPO ₄) (anhyd.)	115.5	0.813
			Sodium dihydrogen phosphate (NaH ₂ PO ₄) (anhyd.)	59.0	0.492
L-Aspartic Acid	26.6	0.2	Calcium Chloride (CaCl ₂)(anhyd.)	102.0	0.9189
L-Cysteine hydrochloride-H ₂ O	70.0	0.3977	Copper Sulfate Pentahydrate (CuSO ₄ • 5H ₂ O)	0.002	0.000008
L-Glutamic Acid	29.0	0.1973	Iron Sulfate Heptahydrate (FeSO ₄ • 7H ₂ O)	0.8	0.002878
L-Alanyl-L-Glutamine	434.4	2.0	Magnesium Chloride (MgCl ₂)(anhyd.)	49.7	0.5231
			Magnesium Sulfate (MgSO ₄)(anhyd.)	192.0	1.6
L-Histidine-H ₂ O	45.8	0.2181	Zinc Sulfate Heptahydrate (ZnSO ₄ • 7H ₂ O)	0.144	0.0005
hydrochloride-H ₂ O			Other components		
L-Isoleucine	7.88	0.06015	D-Glucose (Dextrose)	1260.0	7.0
L-Leucine	26.2	0.2	Phenol red	–	–
L-Lysine hydrochloride	73.0	0.3989			
			Sodium pyruvate	220	2.0
L-Methionine	8.96	0.06013	Hypoxanthine	4.083	0.03
L-Phenylalanine	9.92	0.06012	Alphaipoic Acid	0.210	0.00102
L-Proline	69.0	0.6	Diaminobutane dihydrochloride	0.32	0.001987
L-Serine	21.0	0.2	Thymidine	0.701	0.00289
L-Threonine	23.0	0.1933			
L-Tryptophan	4.1	0.02010			
L-Tyrosine Disodium Salt	13.5	0.05153			
L-Valine	23.0	0.1966			
Vitamins					
Biotin	0.0073	0.0000299			
Choline chloride	14	0.1			