

Ham' s F-12K, GlutaPlus

Cat.No.: G4560

Product Information

Product Name	Cat. No.	Spec.
Ham' s F-12K, GlutaPlus	G4560-500ML	500 mL

Product Description/Introduction

Ham's F-12K medium is a Kaighn's improved version of Ham's F-12 nutrient mix, originally designed for culturing primary human hepatocytes and differentiated mouse and chicken cells under low serum conditions. Ham's F-12K improves the amino acid and sodium pyruvate concentration, reduces the glucose content, and modifies the composition and content of inorganic salts based on the original Ham's F-12. Compared to other medium, Ham's F-12K contains many unique components such as putrescine, thymine, hypoxanthine, and zinc, 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, 2.0 mM L-Alanyl-L-Glutamine, 2.0 mM sodium pyruvate and phenol red indicator, without HEPES.

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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G4560 Ham' s F-12K Formula

- 1 -

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	15	0.2	Calcium Chloride (CaCl ₂)(anhyd.)	102	0.9189
L-Alanine	18	0.2022	Copper Sulfate Pentahydrate (CuSO ₄ • 5H ₂ O)	0.002	0.0000080
L-Arginine hydrochloride	422	2.0	Iron Sulfate Heptahydrate (FeSO ₄ • 5H ₂ O)	0.8	0.002878
L-Asparagine-H ₂ O	30	0.2	Magnesium Chloride (MgCl ₂)(anhyd.)	49.7	0.5231
L-Aspartic Acid	26.6	0.2	Magnesium Sulfate (MgSO ₄) (anhyd.)	192	1.600
L-Cysteine hydrochloride-H ₂ O	70	0.3977	Potassium Chloride (KCl)	285	3.8000
L-Glutamic Acid	29	0.1973	Sodium Bicarbonate (NaHCO ₃)	2500	29.76
L-Alanyl-L-Glutamine	434.4	2	Sodium Chloride (NaCl)	7530	129.9
L-Histidine hydrochloride-H ₂ O	45.8	0.2181	Dibasic sodium phosphate (Na ₂ HPO ₄) (anhyd.)	115.5	0.813
L-Isoleucine	7.88	0.06015	Sodium dihydrogen Phosphate monobasic (NaH ₂ PO ₄) (anhyd.)	59.0	0.492
L-Leucine	26.2	0.2	Zinc Sulfate Heptahydrate (ZnSO ₄ • 7H ₂ O)	0.144	0.0005
L-Lysine hydrochloride	73	0.3989	Other components		
L-Methionine	8.96	0.06013	D-Glucose (Dextrose)	1260	7
L-Phenylalanine	9.92	0.06012	Hypoxanthine	4	0.03053
L-Proline	69	0.6	Alphaipoic Acid	0.21	0.001019
L-Serine	21	0.2	Phenol red	3	0.007970
L-Threonine	23	0.1933	Diaminobutane dihydrochloride	0.32	0.001987
L-Tryptophan	4.1	0.02010	Sodium pyruvate	220	2.0
L-Tyrosine Disodium Salt	13.5	0.05153	Thymine	0.7	0.002892
L-Valine	23	0.1966			
Vitamins					
Biotin	0.07	0.0002869			
Choline chloride	14	0.10			
D-Calcium pantothenate	0.5	0.001048			
Folic Acid	1.3	0.002948			
Niacinamide	0.037	0.0003033			
Pyridoxine hydrochloride	0.06	0.0002913			
Riboflavin	0.04	0.0001064			
Thiamine hydrochloride	0.3	0.0008902			
Vitamin B12	1.4	0.001033			
i-Inositol	18	0.10			