

Ham's F-12, no L-Glutamine

Cat. NO.: G4563

Product Information

Product Name	Cat. No.	Spec.
Ham's F-12, no L-Glutamine	G4563-500ML	500 mL

Product Description/Introduction

Ham's F-12 nutriment Mixture is based on Ham's F-10 nutriment mixture, and it is originally used for serum-free culture of CHO cells. Ham's F-12 is often used as the basic medium for serum-free culture, especially suitable for single cell culture and clonal culture at low serum levels. It is also widely used in the culture of tumor cells and primary cells after adding serum, such as rat hepatocytes, rat prostate epithelial cells, chondrocytes, rat myoblasts and chicken embryonic cells. In addition, Ham's F-12 can be mixed with DMEM in equal volumes to give a more nutritious DMEM/F-12 medium. 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 0.1 μ m filter membrane, pH 7.0-7.4, contains 10 mM D-glucose, 1.0 mM sodium pyruvate, phenol red indicator, no HEPES buffer system and L-glutamine.

Storage and Shipping Conditions

Ship at room temperature; Store 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, or protective clothing.

For Research Use Only!

Ver. No.: V1.1-20260531

Ham' s F-12 medium, no L-Glutamine Formula

Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
Glycine	7.507	0.1	Potassium Chloride (KCl)	223.6	2.98
L-Alanine	8.90	0.10	Sodium bicarbonate(NaHCO ₃)	1176	14
L-Arginine monohydrochloride	210.66	1.0	Sodium chloride (NaCl)	7599	131.02
L-Asparagine monohydrate	15.02	0.10	Sodium Phosphate dibasic (Na ₂ HPO ₄) (anhyd.)	141.96	1.0
L-Asparagine	13.31	0.1	Calcium Chloride (CaCl ₂)(anhyd.)	33.22	0.30
L-Cysteine hydrochloride hydrate	35.05	0.20	Cupric Sulfate (CuSO ₄ • 5H ₂ O)	0.0025	0.00001
L-Glutamic acid	14.71	0.1	Ferrous Sulfate (FeSO ₄ • 7H ₂ O)	0.834	0.003
L-Glutamine	-	-	Magnesium chloride (MgCl ₂)(anhyd.)	57.35	0.60
L-Histidine hydrochloride monohydrate	20.96	0.1	Zinc Sulfate(ZnSO ₄ • 7H ₂ O)	0.862	0.003
L-Isoleucine	4.005	0.031	Other components		
L-Leucine	13.12	0.1	D-Glucose (Dextrose)	1802.0	10.01
L-Lysinehydrochloride	36.50	0.199	Hypoxanthine	1.13	0.00319
L-Methionine	4.51	0.03	Lipoic acid	110	1.0
L-Phenylalanine	5.01	0.03	Phenol Red	4.083	0.03
L-Proline	34.5	0.3	Putrescine 2HCl	0.084	0.0003
L-Serine	10.5	0.1	Sodium pyruvate	0.210	0.00102
L-Threonine	11.9	0.10	Thymidine	0.16107	0.001
L-Tryptophan	2.0	0.01	D-Glucose (Dextrose)	0.701	0.00289
L-Tyrosine disodium salt	7.8	0.0298			
L-Valine	11.7	0.1			
Vitamins					
Biotin	0.0073	0.0000299			
Choline chloride	14	0.1			
D-Calcium pantothenate	0.50	0.001048			
Folic Acid	1.30	0.002948			
Niacinamide	0.04	0.000295			
Pyridoxine hydrochloride	0.06	0.000291			
Riboflavin	0.04	0.000098			
Thiamine hydrochloride	0.30	0.000890			
Vitamin B12	1.40	0.001033			
i-Inositol	18	0.1			