

Rev.ver: 01

1. Identification

Product name	Nutrient Mixture F-12 Ham, Coon's Modification w/Sodium bicarbonate and L-Glutamine
Catalog No	CCML107

2. Description

Ham's Nutrient Mixtures were originally formulated to support single-cell plating of near-diploid Chinese Hamster Ovary (CHO) cells and mouse L-cells. Among these, Ham's Nutrient Mixture F-12 was specifically developed for the serial propagation and cloning of two CHO cell lines—CHD-3 and CHL-1—as well as mouse L-cells. This medium is widely preferred for the cultivation of rodent-derived cells, cloning of myeloma and hybridoma cells, and conducting clonal toxicity assays using CHO cells.

3. Product Specifications

Appearance	Light orange colored, clear solution
CO ₂ concentration, optimum	5.0 %
Storage and shelf life	Store at +2°C to +8°C protected from light. Once opened, store at 4°C and use within 6-8 weeks.
Shipping conditions	Ambient

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4. Formulation

Components	Concentration mg/L
Amino Acids:	
L-Alanine	18.000
L-Arginine HCl	422.000
L-Asparagine monohydrate	30.000
L-Aspartic acid	26.000
L-Cysteine HCl	70.260
L-Glutamic Acid	30.000
L-Glutamine	292.000
Glycine	16.00
L-Histidine HCl H ₂ O	30.000
L-Isoleucine	7.800
L-Leucine	26.200
L-Lysine HCl	73.000
L-Methionine	9.000
L-Phenylalanine	10.000
L-Proline	70.000
L-Serine	21.000
L-Threonine	23.800
L-Tryptophan	4.000
L-Tyrosine 2Na 2H ₂ O	15.860
L-Valine	23.400
Vitamins:	
Choline chloride	13.96
Biotin	0.0073
D-Calcium Pantothenate	0.480
Folic Acid	1.320
Nicotinamide	0.04
Riboflavin	0.04
Pyridoxal HCl	0.06
i-Inositol	18.020

Components	Concentration mg/L
Thiamine HCl	0.340
Vitamin B12	1.360
Inorganic Salts	
CaCl ₂ 2H ₂ O	165.000
Copper Sulphate pentahydrate	0.0025
Fe(NO ₃) ₃ ·9H ₂ O	0.834
KCl	305.000
MgSO ₄ anhydrous	50.800
Magnesium chloride anhydrous	106.000
Sodium chloride	7530.000
Sodium Bicarbonate	2676.000
Disodium hydrogen phosphate	132.040
potassium dihydrogen phosphate	58.500
Zinc sulphate heptahydrate	0.144
Other Components:	
D-Glucose	2000.000
Phenol Red Sodium Salt	1.240
Sodium Pyruvate	220.100
Hypoxanthine sodium salt	4.040
Linoleic acid	0.09
Lipoic acid	0.2063
Putrescine dihydrochloride	0.300
Thymidine	0.700

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.