

Ham's F-12 Dry Powder Media

Cat# CM1012– 1 L/ CM1013—1 L*10

Storage at 4 °C

INTRODUCTION

Ham's F-12K (Kaighn's) Media is a modification of Ham's F-12 Media. It contains 2 mM L-glutamine and 1260 mg/L D-glucose. Ham's F-12K Media contains many components not found in traditional basal media, such as putrescine, thymidine, hypoxanthine, zinc, and higher levels of all amino acids and sodium pyruvate. These additions allow the Media to be supplemented with very low levels of serum or defined components, for primary human hepatocytes, rat and chicken liver cells.

Ham's F-12K Media contains no proteins or growth factors. Therefore, often supplemented with growth factors, Fetal Bovine Serum (FBS) or **Specsure® Bovine Growth Serum**. Ham's F-12K Dry Powder Media **does not** contain sodium bicarbonate, therefore adding **2.5 g sodium bicarbonate** is needed for a 5% CO₂ environment to maintain physiological pH.

Sterility	Sterile-filtered
Form	Powder
Application(s)	Cell culture/ mammalian: suitable
Impurities	Endotoxin, tested
Brand	ACE Biolabs
Components	HEPES (-) Sodium bicarbonate (-) L-glutamine (2 mM) D-glucose (1260 mg/ml) Phenol red (3 mg/ml)
Storage temp	2-8 °C

CONTENTS

No	Component	CM1012– 1 L	CM1013—1L*10
	Ham's F-12 Dry Powder Media	1 pack	1L x 10 packs

NOTES

1. The net weight of this product is 11.15 g, and 1L Ham's F-12K medium can be prepared.
2. Dissolve the Ham's F-12K Powder with ultrapure water for cell culture.
3. Add **2.5 g sodium bicarbonate** and dissolve fully.

4. (Optional) Adjust pH with 1M NaOH solution or 1M HCl solution.
5. Add ultrapure water for cell culture to the final volume of 1L.
6. The prepared solution should be sterilized with 0.22 μm filters under aseptic condition.

COMPOSITION

INORGANIC SALTS	g/L
CaCl ₂ ·2H ₂ O	0.13524
CuSO ₄ ·5H ₂ O	0.0000025
FeSO ₄ ·7H ₂ O	0.000834
MgCl ₂ ·6H ₂ O	0.10572
MgSO ₄ (anhydrous)	0.19264
KCl	0.28329
KH ₂ PO ₄ (anhydrous)	0.05852
Na ₂ HPO ₄ (anhydrous)	0.11502
NaCl	7.59720
ZnSO ₄ ·7H ₂ O	0.000144
AMINO ACIDS	
L-Arginine (free base)	0.42140
L-Alanine	0.01782
L-Asparagine·H ₂ O	0.03020
L-Aspartic Acid	0.02662
L-Cysteine·HCl·H ₂ O	0.07024
L-Glutamic Acid	0.02942
L-Glutamine	0.29220
Glycine	0.01501
L-Histidine·HCl·H ₂ O	0.04192
L-Isoleucine	0.00782
L-Leucine	0.02624
L-Lysine·HCl	0.07304
L-Methionine	0.00895
L-Phenylalanine	0.00991
L-Proline	0.06906
L-Serine	0.02102
L-Threonine	0.02382
L-Tryptophan	0.00408
L-Tyrosine (free base)	0.01087
L-Valine	0.02342
L-Arginine (free base)	0.42140

VITAMINS	
D-Biotin	0.0000733
Choline Chloride	0.01396
Folic Acid	0.00132
Hypoxanthine	0.00408
myo-Inositol	0.01802
Nicotinamide	0.0000366
D-Pantothenic Acid	0.000477
Putrescine·2HCl	0.000322
Pyridoxine·HCl	0.0000617
Riboflavin	0.0000376
Thiamine·HCl	0.000337
Thymidine	0.000727
Vitamin B-12	0.001355
OTHER	
D-Glucose	1.26000
Phenol Red Sodium Salt	0.00332
Sodium Pyruvate	0.22000
Lipoic Acid	0.00021

RELATED PRODUCTS

Specsure Bovine Growth Serum	ACE002	500 ml
MEM (Minimum Essential Media)	CM1005	500 ml
MEM (Minimum Essential Media), Dry Powder Media	CM1006	1 L
MEM (Minimum Essential Media), Dry Powder Media	CM1007	10 x 1L
DMEM (Dulbecco's modified minimal essential Media, DMEM)	CM1008	500 ml
DMEM (Dulbecco's modified minimal essential Media, DMEM), Dry Powder Media	CM1009	1 L
DMEM (Dulbecco's modified minimal essential Media, DMEM), Dry Powder Media	CM1010	10 x 1L
Ham's F-12K Media	CM1011	500 ml
Ham's F-12K Dry Powder Media	CM1012	1 L
Ham's F-12K Dry Powder Media	CM1013	10 x 1L
DMEM/F12 Media	CM1014	500 ml
DMEM/F12 Dry Powder Media	CM1015	1 L
DMEM/F12 Dry Powder Media	CM1016	10 x 1L
RPMI-1640 Media	CM1017	500 ml
RPMI-1640 Dry Powder Media	CM1018	1 L

RPMI-1640 Dry Powder Media	CM1019	10 x 1L
M-199 Media	CM1020	500 ml
M-199 Dry Powder Media	CM1021	1 L
M-199 Dry Powder Media	CM1022	10 x 1L

PRODUCT USE LIMITATION

These products are intended for research use only.