

Ham's F12 Medium

Description

In the past Ham's F12 was the first choice for a serum-free cultivation of CHO-cells and is now substituted through better serum-free systems like our Panserin C6000, which is protein-free in addition. However, Ham's F12 is an appropriate medium for mammalian cells when it is supplemented with FBS. It contains a high concentration of vitamins, amino acids and trace elements. The content of zinc sulphate is increased and it contains putrescine and linoleic acid.

Liquid Media

Ham's F12 Medium⁽¹⁾
without L-Glutamine
with 1.176 g/L NaHCO₃ 500 ml P04-14550

Ham's F12 Medium⁽¹⁾
with L-Glutamine
with 1.176 g/L NaHCO₃ 500 ml P04-14500

Ham's F12 Medium⁽²⁾
with L-Glutamine
without Phenol red
with 25 mM Hepes
with 1.176 g/L NaHCO₃ 500 ml P04-14501

Ham's F12 Medium⁽¹⁾
with stab. Glutamine
with 1.176 g/L NaHCO₃ 500 ml P04-15500

Ham's F12 Medium⁽²⁾
without L-Glutamine
without Phenol red
with 1.176 g/L NaHCO₃ 500 ml P04-14559

Ham's F12K Medium⁽²⁾
with L-Glutamine
with 2.5 g/L NaHCO₃ 500 ml P04-15600

Powder Media

Ham's F12 Medium⁽¹⁾
with L-Glutamine 10 L P03-4110
without NaHCO₃ 50 L P03-4150

Composition

	Components	mg/L
Inorganic Salts	Calcium chloride anhydrous	33.30
	Copper(II) sulfate x 5H ₂ O	0.003
	Iron(II) sulfate x 7H ₂ O	0.834
	Magnesium chloride x 6H ₂ O	122.00
	Potassium chloride	223.65
	Sodium chloride	7599.9
	di-Sodium hydrogen phosphate anhydrous	142.04
	Zinc sulfate x 7H ₂ O	0.86
Other Components	D(+)-Glucose anhydrous	1801.60
	Hepes	5958.00
	Hypoxanthine	4.08
	Linoleic acid	0.084
	DL-Lipoic acid	0.21
	Phenol red	1.20
	Putrescine x 2HCl	0.16
	Sodium pyruvate	110.00
	Thymidine	0.73
Amino acids	L-Alanine	8.91
	L-Arginine x HCl	210.70
	L-Asparagine x H ₂ O	15.01
	L-Aspartic acid	13.31
	L-Cysteine x HCl x H ₂ O	35.12
	L-Glutamine	146.20
	L-Glutamic acid	14.71
	Glycine	7.51
	L-Histidine x HCl x H ₂ O	20.96
	L-Isoleucine	3.94
	L-Leucine	13.12
	L-Lysine x HCl	36.54
	L-Methionine	4.48
	L-Phenylalanine	4.96
	L-Proline	34.53
	L-Serine	10.51
L-Threonine	11.91	
L-Tryptophan	2.04	
L-Tyrosine	5.44	
L-Valine	11.71	
Vitamins	D(+)-Biotin	0.007
	D-Calcium pantothenate	0.24
	Choline chloride	13.96
	Folic acid	1.32
	myo-Inositol	18.00
	Nicotinamide	0.037
	Pyridoxine x HCl	0.062
	Riboflavin	0.038
	Thiamine x HCl	0.34
	Vitamin B12	1.36

When 5,958.00 mg/L HEPES is included there is only 7,099.00 mg/L sodium chloride.

(1) usually on stock, (2) minimum order 10 l, (3) available on request