



### Ham's F-12 K 营养培养基 (Kaighn 改良)

组分	分子量	MD0400	
		浓度 (mg/L)	摩尔浓度 (mM)
Glycine	75	15	0.2
L-Alanine	89	18	0.2022472
L-Arginine hydrochloride	211	422	2
L-Asparagine-H <sub>2</sub> O	150	30	0.2
L-Aspartic acid	133	26.6	0.2
L-Cysteine hydrochloride-H <sub>2</sub> O	176	70	0.3977273
L-Glutamic Acid	147	29	0.1972789
L-Glutamine	146	292	2
L-Histidine hydrochloride-H <sub>2</sub> O	210	45.8	0.2180952
L-Isoleucine	131	7.88	0.0601527
L-Leucine	131	26.2	0.2
L-Lysine hydrochloride	183	73	0.3989071
L-Methionine	149	8.96	0.0601342
L-Phenylalanine	165	9.92	0.0601212
L-Proline	115	69	0.6
L-Serine	105	21	0.2
L-Threonine	119	23	0.1932773
L-Tryptophan	204	4.1	0.020098
L-Tyrosine disodium salt dihydrate	262	13.5	0.0515267
L-Valine	117	23	0.1965812
Biotin	244	0.07	0.0002869
Choline chloride	140	14	0.1
D-Calcium pantothenate	477	0.5	0.0010482
Folic Acid	441	1.3	0.0029478



i-Inositol	180	18	0.1
Niacinamide	122	0.037	0.0003033
Pyridoxine hydrochloride	206	0.06	0.0002913
Riboflavin	376	0.04	0.0001064
Thiamine hydrochloride	337	0.3	0.0008902
Vitamin B12	1355	1.4	0.0010332
Calcium Chloride (CaCl <sub>2</sub> ) (anhyd.)	111	102	0.9189189
Cupric sulfate (CuSO <sub>4</sub> ·5H <sub>2</sub> O)	250	0.002	0.000008
Ferric sulfate (FeSO <sub>4</sub> ·7H <sub>2</sub> O)	278	0.8	0.0028777
Magnesium Chloride (anhydrous)	95	49.7	0.5231579
Magnesium Sulfate (MgSO <sub>4</sub> ) (anhyd.)	120	192	1.6
Potassium Chloride (KCl)	75	285	3.8
Sodium Bicarbonate (NaHCO <sub>3</sub> )	84	2500	29.761906
Sodium Chloride (NaCl)	58	7530	129.82759
Sodium Phosphate dibasic (Na <sub>2</sub> HPO <sub>4</sub> ) anhydrous	142	115.5	0.8133803
Sodium Phosphate monobasic (NaH <sub>2</sub> PO <sub>4</sub> ) anhydrous	139	59	0.4244604
Zinc sulfate (ZnSO <sub>4</sub> ·7H <sub>2</sub> O)	288	0.144	0.0005
D-Glucose (Dextrose)	180	1260	7
Hypoxanthine Na	159	4	0.0251572
Linoleic Acid	280		
Lipoic Acid	206	0.21	0.0010194
Phenol Red	376.4	3	0.0079702
Putrescine 2HCl	161	0.32	0.0019876
Sodium Pyruvate	110	220	2
Thymidine	242	0.7	0.0028926