

## DMEM/F12

**Cat:** D6500、D6501

**Size:** 500mL

**Storage:** Store at 2-8°C away from light for 12 months.

### Kit Components:

Cat. NO.	D6500	D6501	Cat. NO.	D6500	D6501
Components	Concentration (mg/L)	Concentration (mg/L)	Components	Concentration (mg/L)	Concentration (mg/L)
<i>Inorganic Salts</i>			L-Phenylalanine	35.48	35.48
CaCl <sub>2</sub> (anhydrous)	116.65	116.65	L-Proline	17.25	17.25
CuSO <sub>4</sub> (anhydrous)	0.0008	0.0008	L-Serine	26.25	26.25
Fe(NO <sub>3</sub> ) <sub>3</sub> •9H <sub>2</sub> O	0.05	0.05	L-Threonine	53.55	53.55
FeSO <sub>4</sub> •7H <sub>2</sub> O	0.417	0.417	L-Tryptophan	9.02	9.02
KCl	311.8	311.8	L-Tyrosine•2Na•2H <sub>2</sub> O	55.815	55.815
MgSO <sub>4</sub> (anhydrous)	84.95	84.95	L-Valine	52.85	52.85
NaCl	7000	7000	Vitamins		
NaH <sub>2</sub> PO <sub>4</sub> •H <sub>2</sub> O	62.5	62.5	Biotin	0.00365	0.00365
Na <sub>2</sub> HPO <sub>4</sub> (anhydrous)	71	71	D-Calcium pantothenate	2.24	2.24
NaHCO <sub>3</sub>	2438	2438	Choline chloride	8.98	8.98
ZnSO <sub>4</sub> •7H <sub>2</sub> O	0.4315	0.4315	Folic acid	2.65	2.65
<i>Amino Acids</i>			i-Inositol	12.61	12.61
L-Alanine	4.45	4.45	Nicotinamide	2.0185	2.0185
L-Arginine•HCl	147.5	147.5	Pyridoxine•HCl	2.031	2.031
L-Asparagine•H <sub>2</sub> O	7.5	7.5	Riboflavin	0.219	0.219
L-Aspartic acid	6.65	6.65	Thiamine•HCl	2.17	2.17
L-Cysteine•HCl•H <sub>2</sub> O	17.56	17.56	Vitamin B12	0.68	0.68
L-Cystine•2HCl	31.285	31.285	<i>Other</i>		
L-Glutamic acid	7.35	7.35	D-Glucose	3151	3151
L-Glutamine	365.1	365.1	Lipoic acid	0.105	0.105
Glycine	18.75	18.75	Hypoxanthine, Na	2.385	2.385
L-Histidine•HCl•H <sub>2</sub> O	31.48	31.48	Methyl lineoleate	0.044	0.044
L-Isoleucine	54.37	54.37	Phenol red, Na	-	8.1
L-Leucine	58.95	58.95	Sodium pyruvate	110	110
L-Lysine•HCl	91.35	91.35	Putrescine•2HCl	0.08	0.08
L-Methionine	17.24	17.24	Thymidine	0.365	0.365

### Introduction:

DMEM-Ham's F12 was developed for use by researchers in serum-free cell cultures. It

replaces the addition of serum to a culture medium with a mix of nutrients, growth factors and hormones. Mather and Sato reported the addition of insulin, transferrin, epidermal growth factor, luteinizing hormone, LH) or follicle stimulating hormone (FSH), insulin-like growth factor (somatomedin), and growth hormone were used to successfully culture Leydig and Sertoli cells. The 1:1 mixture of Dulbecco's Modified Eagle's Medium (DME) and Ham's F-12 was suitable for most cells, although different levels of hormones were used for different cells. A 15mM HEPES is commonly used to provide acid-base buffering to compensate for the lack of buffering in the medium without serum addition.

The difference between DMIM-Ham's F12 is mainly whether it contains phenol red or not.

**Osmotic pressure:** 300±20mOsm

**pH:** 7.2±0.2