

Supplementary Table 1. Composition of API-I, DMEM, Medium 199, and EBSS media, and non-essential amino acid (MEM) supplement.

Component (g/L)	API-I	DMEM (Sigma D5648)	Medium 199 (Sigma M5017)	EBSS 1X (Sigma E7510)	MEM 1X (Sigma M7145)
Inorganic salts					
CaCl ₂	0.044	0.2	0.2	0.265	
Fe(NO ₃) ₃ • 9H ₂ O	-	0.0001	0.00072	-	
MgSO ₄	0.022	0.09767	0.09767	0.09767	
KCl	0.088	0.4	0.4	0.4	
CH ₃ COONa	0.0035	-	0.05	-	
NaHCO ₃	0.665	-	-	-	
NaCl	1.585	6.4	6.8	6.8	
Na ₂ HPO ₄	0.03	-	-	-	
NaH ₂ PO ₄	-	0.109	0.122	0.122	
ZnSO ₄ • 7H ₂ O	-	-	-	-	
Amino acids					
L-Alanine	0.00089	-	0.025	-	0.0089
L-Arginine • HCl	0.021	0.084	0.07	-	-
L-Asparagine	0.0015	-	-	-	0.015
L-Aspartic Acid	0.00133	-	0.03	-	0.0133
L-Cysteine • HCl • H ₂ O	0.00125	-	0.00011	-	-
L-Cystine • 2HCl	0.012	0.0626	0.026	-	-
L-Glutamic Acid	0.00147	-	0.0668	-	0.0147
L-Glutamine	0.292	0.584	0.1	-	-
Glycine	0.0075	0.03	0.05	-	0.0075
L-Histidine • HCl • H ₂ O	0.0008	0.042	0.02188	-	-
Hydroxy-L-Proline	-	-	0.01	-	-
L-Isoleucine	0.0026	0.105	0.02	-	-
L-Leucine	0.0026	0.105	0.06	-	-
L-Lysine • HCl	0.0037	0.146	0.07	-	-

L-Methionine	0.00075	0.03	0.015	-	-
L-Phenylalanine	0.00165	0.066	0.025	-	-
L-Proline	0.00115	-	0.04	-	0.0115
L-Serine	0.00105	0.042	0.025	-	0.0105
L-Threonine	0.0024	0.095	0.03	-	-
L-Tryptophan	0.0004	0.016	0.01	-	-
L-Tyrosine • 2Na • 2H ₂ O	0.0018	0.10379	0.05766	-	-
L-Valine	0.00235	0.094	0.025	-	-
Vitamins					
Ascorbic acid • Na (vitamin C)	0.0005	-	0.0000566	-	
Biotin (vitamin B ₇)	0.001	-	0.00001	-	
Butyric acid	0.0005	-	-	-	
Calciferol (vitamin D ₂)	-	-	0.0001	-	
Vitamin D ₃ (cholecalciferol)	0.000000618	-	-	-	
Choline Chloride	0.001	0.004	0.0005	-	
Cyanocobalamin (vitamin B ₁₂)	0.01	-	-	-	
Folic Acid (vitamin M)	0.001	0.004	0.00001	-	
Menadione (sodium bisulfite) (vitamin K ₃)	-	-	0.000016	-	
Vitamin K	0.000000006	-	-	-	
<i>myo</i> -Inositol	0.002	0.0072	0.00005	-	
Niacinamide (vitamin B ₃)	0.001	0.004	0.000025	-	
Nicotinic acid (vitamin B ₃)	-	-	0.000025	-	

P-aminobenzoic acid (vitamin H ₁)	0.00375	-	0.00005	-
D-Pantothenic Acid (vitamin B ₅)	0.001	0.004	0.00001	-
Propionic acid	0.001	-	-	-
Pyridoxal • HCl	0.001	0.004	0.000025	-
Pyridoxine • HCl (vitamin B ₆)	-	-	0.000025	-
Retinol acetate (vitamin A)	0.0000000618	-	0.00014	-
Riboflavin (vitamin B ₂)	0.0001	0.0004	0.00001	-
DL- α -Tocopherol Phosphate • Na (vitamin E)	0.000000006	-	0.00001	-
Thiamine • HCl (vitamin B ₁)	0.001	0.004	0.00001	-
Other supplements				
Adenine Sulfate	-	-	0.01	-
Adenosine Triphosphate • 2Na	0.000475	-	0.001	-
Adenosine Monophosphate • Na/ Adenylic acid	0.000435	-	0.0002385	-
Casein	0.15%	-	-	-
Cholesterol	-	-	0.0002	-
Cytidine 2'-3'-monophosphoric acid	0.000385	-	-	-
Deoxyribose	-	-	0.0005	-
Dextrose	0.007	-	-	-
Fructose	0.0018	-	-	-
Fumaric acid	0.0000072	-	-	-

N-acetyl-D-glucosamine	0.075	-	-	-
D-Glucose	-	4.5	1	1
Glutathione (reduced)	-	-	0.00005	-
Guanine • HCl	-	-	0.0003	-
Guanylic acid (sodium salt)	0.000505	-	-	-
HEPES	-	-	-	-
Hypoxanthine	-	-	0.0003	-
alpha-ketoglutaric acid	0.004	-	-	-
Malic acid	0.006	-	-	-
Maltose	0.0085	-	-	-
Phenol Red • Na	-	0.0159	0.0213	0.011
TWEEN 80	-	-	0.02	-
Pyruvic Acid • Na	0.01	-	-	-
Ribose	-	-	0.0005	-
Trehalose	0.0035	-	-	-
Thymine	0.0001225	-	0.0003	-
Uracil	-	-	0.0003	-
Xanthine • Na	-	-	0.000344	-
NaHCO ₃	-	3.7	2.2	2.2
SFB	25%	-	-	-
Rabbit embryo extract	1.5%	-	-	-
Calf liver extract	1.4%	-	-	-
Bactopectone	0.51%	-	-	-
Trypticase	0.5%	-	-	-
Yeast extract	0.3%	-	-	-

API-I: concentrations calculated based on Douvres & Malakatis (1977) and Stringfellow (1986). DMEM: Dulbecco's modified Eagle's medium. EBSS: Earle's balanced salt solution.