caisson LABS

Comparative Formulation

DMEM / Ham's F-12

Powdered Media	DFP01	DFP02	DFP03	DFP04	DFP05	DFP07	DFP08	DFP14
Amino Acids	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500		18.7500	18.7500	18.7500	18.7500
L-Alanine	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride		147.5000		147.5000	147.5000	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500
L-Glutamine	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000		365.0000
L-Histidine		23.3000						
L-Histidine, Hydrochloride, Monohydrate	31.4800		31.4800	31.4800	31.4800	31.4800	31.4800	31.4800
L-Isoleucine	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride		91.2500		91.2500	91.2500	91.2500	91.2500	91.2500
L-Methionine	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	
L-Phenylalanine	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500
L-Serine	26.2500		26.2500	26.2500	26.2500	26.2500	26.2500	
L-Threonine	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500
L-Tryptophan	9.0200	9.0200	9.0200	9.0200		9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500

Powdered Media	DFP01	DFP02	DFP03	DFP04	DFP05	DFP07	DFP08	DFP14
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100	28.6400	28.6100	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300	48.8400	48.9300	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000
Sodium Chloride	6995.5000	6995.5000	6995.5000	6999.5000	6995.5000	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600	71.0200	70.9600	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000	1401.0000	3151.0000	3151.0000		3151.0000
HEPES	3574.5000	3574.5000	3574.5000		3574.5000			3574.5000
Hypoxanthine, Sodium	2.3900	2.3900	2.3900		2.3900	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000			8.1000		8.1000	8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000	110.0000	55.0000			55.0000
Thymidine	0.3650	0.3650	0.3650		0.3650	0.3650	0.3650	0.3650

Powdered Media	DFP01	DFP02	DFP03	DFP04	DFP05	DFP07	DFP08	DFP14
Vitamins	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	
D-Calcium Pantothenate	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200
Pyridoxal, Hydrochloride				2.0000				
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310	0.0310	2.0310	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800

Powdered Media	DFP15	DFP16	DFP17	DFP18	DFP19	DFP22	DFP24	DFP25
Amino Acids	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	
L-Alanine	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600		17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900		31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500
L-Glutamine	365.0000	365.0000	365.0000	365.0000	365.0000		365.0000	365.0000
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800
L-Isoleucine	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500
L-Methionine		17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500
L-Threonine	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500
L-Tryptophan	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500

Powdered Media	DFP15	DFP16	DFP17	DFP18	DFP19	DFP22	DFP24	DFP25
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000
Sodium Chloride	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000
HEPES	3574.5000		3574.5000	3574.5000				3574.5000
Hypoxanthine, Sodium	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000			8.1000	8.1000	8.1000	8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000
Thymidine	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650

Powdered Media	DFP15	DFP16	DFP17	DFP18	DFP19	DFP22	DFP24	DFP25
Vitamins	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride		8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500		2.6500
Myo-Inositol	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800		0.6800

Powdered Media	DFP26	DFP27	DFP28	DFP29	DFP30	DFP31	DFP32	DFP33
Amino Acids	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500
L-Alanine		4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride	147.5000		147.5000	147.5000	147.5000	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000		7.5000	7.5000	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500		6.6500	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600	17.5600		17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900	31.2900		31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500	7.3500	7.3500		7.3500	7.3500
L-Glutamine	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000		365.0000
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	
L-Isoleucine	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500
L-Methionine	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500
L-Threonine	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500
L-Tryptophan	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500

Powdered Media	DFP26	DFP27	DFP28	DFP29	DFP30	DFP31	DFP32	DFP33
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000
Sodium Chloride	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000
HEPES	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000
Hypoxanthine, Sodium	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000
Thymidine	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650

Powdered Media	DFP26	DFP27	DFP28	DFP29	DFP30	DFP31	DFP32	DFP33
Vitamins	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800

Powdered Media	DFP34	DFP35	DFP36	DFP37	DFP38	DFP39	DFP40	DFP41
Amino Acids	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500
L-Alanine	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500
L-Glutamine	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800
L-Isoleucine		54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700
L-Leucine	59.0500		59.0500	59.0500	59.0500	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride	91.2500	91.2500		91.2500	91.2500	91.2500	91.2500	91.2500
L-Methionine	17.2400	17.2400	17.2400		17.2400	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	35.4800	35.4800		35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500	17.2500	17.2500		17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500		26.2500
L-Threonine	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	
L-Tryptophan	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500

Powdered Media	DFP34	DFP35	DFP36	DFP37	DFP38	DFP39	DFP40	DFP41
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000
Sodium Chloride	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000
HEPES	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000	3574.5000
Hypoxanthine, Sodium	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000
Thymidine	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650

Powdered Media	DFP34	DFP35	DFP36	DFP37	DFP38	DFP39	DFP40	DFP41
Vitamins	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800

Powdered Media	DFP42	DFP43	DFP44
Amino Acids	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500
L-Alanine	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500
L-Glutamine	365.0000	365.0000	365.0000
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800
L-Isoleucine	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride	91.2500	91.2500	91.2500
L-Methionine	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500
L-Threonine	53.4500	53.4500	53.4500
L-Tryptophan		9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900		55.7900
L-Valine	52.8500	52.8500	

Powdered Media	DFP42	DFP43	DFP44
Inorganic Salts	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000
Sodium Chloride	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000
HEPES	3574.5000	3574.5000	3574.5000
Hypoxanthine, Sodium	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000	8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000
Thymidine	0.3650	0.3650	0.3650

Powdered Media	DFP42	DFP43	DFP44
Vitamins	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035
Choline Chloride	8.9800	8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800

Liquid Media	DFL06	DFL13	DFL14	DFL15	DFL16	DFL21	DFL22	DFL23
Amino Acids	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500	18.7500
L-Alanine	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500	4.4500
L-alanyl-L-glutamine	542.0000					542.0000		
L-Arginine, Hydrochloride		147.5000	147.5000	147.5000	147.5000	147.5000	147.5000	147.5000
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500	7.3500
L-Glutamine		365.0000	365.0000	365.0000	365.0000			
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800	31.4800
L-Isoleucine	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride		91.2500	91.2500	91.2500	91.2500	91.2500	91.2500	91.2500
L-Methionine		17.2400	17.2400	17.2400	17.2400	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800	35.4800
L-Proline	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500	26.2500
L-Threonine	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500	53.4500
L-Tryptophan	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500	52.8500

Liquid Media	DFL06	DFL13	DFL14	DFL15	DFL16	DFL21	DFL22	DFL23
Inorganic Salts	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6400	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.8400	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000	311.8000
Sodium Bicarbonate	2438.0000	1200.0000	1200.0000	2438.0000	2438.0000	2438.0000	2438.0000	2438.0000
Sodium Chloride	6999.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000	6995.5000
Sodium Phosphate Dibasic, Anhydrous	71.0200	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	3151.0000	
HEPES		3574.5000	3574.5000					
Hypoxanthine, Sodium	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt	8.1000	8.1000		8.1000		8.1000	8.1000	
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000	55.0000
Thymidine	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650	0.3650

Liquid Media	DFL06	DFL13	DFL14	DFL15	DFL16	DFL21	DFL22	DFL23
Vitamins	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200	2.0200
Pyridoxine, Hydrochloride	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310	2.0310
Riboflavin	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800

Liquid Media	DFL25	DFL27	DFL28
Amino Acids	mg/L	mg/L	mg/L
Glycine	18.7500	18.7500	18.7500
L-Alanine	4.4500	4.4500	4.4500
L-Arginine, Hydrochloride	147.5000		
L-Asparagine, Monohydrate	7.5000	7.5000	7.5000
L-Aspartic Acid	6.6500	6.6500	6.6500
L-Cysteine, Hydrochloride, Monohydrate	17.5600	17.5600	17.5600
L-Cystine, Dihydrochloride	31.2900	31.2900	31.2900
L-Glutamic Acid	7.3500	7.3500	7.3500
L-Glutamine	365.0000	365.0000	
L-Histidine, Hydrochloride, Monohydrate	31.4800	31.4800	31.4800
L-Isoleucine	54.4700	54.4700	54.4700
L-Leucine	59.0500	59.0500	59.0500
L-Lysine, Hydrochloride	91.2500		
L-Methionine	17.2400	17.2400	17.2400
L-Phenylalanine	35.4800	35.4800	25.4800
L-Proline	17.2500	17.2500	17.2500
L-Serine	26.2500	26.2500	26.2500
L-Threonine	53.4500	53.4500	53.4500
L-Tryptophan	9.0200	9.0200	9.0200
L-Tyrosine, Disodium, Dihydrate	55.7900	55.7900	55.7900
L-Valine	52.8500	52.8500	55.7900

Liquid Media	DFL25	DFL27	DFL28
Inorganic Salts	mg/L	mg/L	mg/L
Calcium Chloride, Anhydrous	116.6000	116.6000	116.6000
Cupric Sulfate, Pentahydrate	0.0013	0.0013	0.0013
Ferric Nitrate, Nonahydrate	0.0500	0.0500	0.5000
Ferrous Sulfate, Heptahydrate	0.4170	0.4170	0.4170
Magnesium Chloride, Anhydrous	28.6100	28.6100	28.6100
Magnesium Sulfate, Anhydrous	48.9300	48.9300	48.9300
Potassium Chloride	311.8000	311.8000	311.8000
Sodium Bicarbonate	1200.0000	2438.0000	1200.0000
Sodium Chloride	6995.5000	6995.5000	1000.0000
Sodium Phosphate Dibasic, Anhydrous	70.9600	70.9600	70.9600
Sodium Phosphate, Monobasic, Monohydrate	62.5000	62.5000	62.5000
Zinc Sulfate, Heptahydrate	0.4320	0.4320	0.4320
Other Components	mg/L	mg/L	mg/L
D-Glucose, Anhydrous	3151.0000	3151.0000	3151.0000
HEPES	3574.5000		
Hypoxanthine, Sodium	2.3900	2.3900	2.3900
Linoleic Acid	0.0420	0.0420	0.0420
Lipoic Acid (DL-Thiotic Acid)	0.1050	0.1050	0.1050
Phenol Red, Sodium Salt		8.1000	8.1000
Putrescine, Dihydrochloride	0.0810	0.0810	0.0810
Pyruvic Acid, Sodium Salt	55.0000	55.0000	
Thymidine	0.3650	0.3650	0.3650

Liquid Media	DFL25	DFL27	DFL28
Vitamins	mg/L	mg/L	mg/L
Biotin	0.0035	0.0035	0.0035
Choline Chloride		8.9800	8.9800
D-Calcium Pantothenate	2.2400	2.2400	2.2400
Folic Acid	2.6500	2.6500	2.6500
Myo-Inositol	12.6000	12.6000	12.6000
Niacinamide	2.0200	2.0200	2.0200
Phloroglucinol			2.0310
Pyridoxine, Hydrochloride	2.0310	2.0310	
Pyruvic Acid, Sodium Salt			55.0000
Riboflavin	0.2190	0.2190	0.2190
Thiamine, Hydrochloride	2.1700	2.1700	2.1700
Vitamin B12	0.6800	0.6800	0.6800