



SILAC Media Composition

DMEM Media (DMEM-500)		RPMI Media (RPMI-500)	
Concentration (mg/L)	Concentration (mM)	Concentration (mg/L)	Concentration (mM)

Inorganic Salts

Calcium chloride	200	1.8021	–	–
Calcium nitrate tetrahydrate	–	–	100	0.4253
Ferric nitrate nonahydrate	0.1	0.0002	–	–
Potassium chloride	400	5.3655	400	5.3655
Magnesium sulfate heptahydrate	–	–	100	0.4056
Magnesium sulfate (anhydrous)	97.67	0.8112	–	–
Sodium chloride	6400	109.514	6000	102.6694
Sodium phosphate dibasic (anhydrous)	–	–	800	5.6354
Sodium phosphate monobasic monohydrate	125	0.9059	–	–
Sodium bicarbonate	3700	44.0424	2000	23.0867

Amino Acids

L-Asparagine (anhydrous)	–	–	50	0.3784
L-Aspartic acid	–	–	20	0.1503
L-Cystine dihydrochloride	63	0.2013	65	0.208
L-Glutamic acid	–	–	20	0.1359
L-Glutamine	584	3.9959	300	2.0527
Glycine	30	0.3996	10	0.1333
L-Histidine	–	–	15	0.0967
L-Histidine hydrochloride monohydrate	42	0.2004	–	–
Hydroxy-L-proline	–	–	20	0.1525
L-Isoleucine	105	0.8015	50	0.3812
L-Leucine	105	0.8015	50	0.3812
L-Methionine	30	0.2011	15	0.1005
L-Phenylalanine	66	0.3995	15	0.0908
L-Proline	–	–	20	0.1737
L-Serine	42	0.3997	30	0.2855
L-Threonine	95	0.7983	20	0.1679
L-Tryptophan	16	0.0783	5	0.0245
L-Tyrosine disodium salt dihydrate	104	0.3988	29	0.1111
L-Valine	94	0.8034	20	0.1707

Vitamins

D-Biotin	–	–	0.2	0.0008
Calcium D-pantothenate	4	0.0084	0.25	0.0005
Choline chloride	4	0.0286	3	0.0215
Folic acid	4	0.0091	1	0.0023
myo (l)-Inositol	7	0.0389	35	0.1943
Niacinamide	4	0.0328	1	0.0082

Continued ►

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Vitamins *(continued)*

Paba	–	–	1	0.0073
Pyridoxine hydrochloride	4	0.0195	1	0.0049
Riboflavin	0.4	0.0011	0.2	0.0005
Thiamine hydrochloride	4	0.0119	1	0.003
Vitamin B ₁₂	–	–	0.005	0.000004

Other

D-Glucose	4500	24.9778	2000	11.1012
L-Glutathione	–	–	1	0.0033
Phenol red sodium salt	15	0.03985	5	0.0133
Sodium pyruvate	110	0.9996	–	–

Note: SILAC media are manufactured and provided by Thermo Fisher Scientific under license from the University of Washington, which is protected by US Patent 6,653,076 (for research use only).

