

Cryoprotective Medium w/o  
L-Glutamine  
w/ 15% DMSO

12-132

**Lonza**

Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Calcium Chloride Dihydrate	10035-04-8	CaCl <sub>2</sub> • 2H <sub>2</sub> O	0.158	158.000	1.075	1.075E+03
Dextrose	50-99-7	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	0.850	850.000	4.718	4.718E+03
Magnesium Sulfate Heptahydrate	10034-99-8	MgSO <sub>4</sub> • 7H <sub>2</sub> O	0.170	170.000	0.690	6.897E+02
Potassium Chloride	7447-40-7	KCl	0.340	340.000	4.561	4.561E+03
Potassium Phosphate Monobasic Anhydrous	7778-77-0	KH <sub>2</sub> PO <sub>4</sub>	0.051	51.000	0.375	374.724
Sodium Bicarbonate	144-55-8	NaHCO <sub>3</sub>	0.298	298.000	3.547	3.547E+03
Sodium Chloride	7647-14-5	NaCl	6.800	6.800E+03	116.359	1.164E+05
Sodium Phosphate Dibasic-7-Hydrate	7782-85-6	Na <sub>2</sub> HPO <sub>4</sub> • 7H <sub>2</sub> O	7.700E-02	77.000	0.287	287.238
L-Arginine Monohydrochloride	1119-34-2	C <sub>6</sub> H <sub>14</sub> N <sub>4</sub> O <sub>2</sub> • HCl	1.794E-02	17.935	8.514E-02	85.137
L-Cystine	56-89-3	C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub>	1.020E-02	10.200	4.245E-02	42.447
L-Histidine Monohydrochloride Monohydrate	5934-29-2	C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> • HCl • H <sub>2</sub> O	8.925E-03	8.925	4.258E-02	42.581
L-Isoleucine	73-32-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>3</sub>	2.227E-02	22.270	0.170	169.780
L-Leucine	61-90-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	2.227E-02	22.270	0.170	169.780
L-Lysine Monohydrochloride	657-27-2	C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> • HCl	3.103E-02	31.025	0.170	169.860
L-Methionine	63-68-3	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CH <sub>2</sub> SCH <sub>3</sub>	6.375E-03	6.375	0.043	42.728
L-Phenylalanine	63-91-2	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> C <sub>6</sub> H <sub>5</sub>	1.403E-02	14.025	8.490E-02	84.902
L-Threonine	72-19-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(OH)CH <sub>3</sub>	2.023E-02	20.230	0.170	169.829
L-Tryptophan	73-22-3	C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	3.400E-03	3.400	1.665E-02	16.648
L-Tyrosine	60-18-4	C <sub>9</sub> H <sub>11</sub> N <sub>3</sub> O <sub>3</sub>	1.539E-02	15.385	8.491E-02	84.911
L-Valine	72-18-4	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(CH <sub>3</sub> ) <sub>2</sub>	1.989E-02	19.890	0.170	169.855
D-Biotin (Vitamin H)	58-85-5	C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub> S	2.077E-04	0.208	8.500E-04	0.850
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C <sub>18</sub> H <sub>32</sub> CaN <sub>2</sub> O <sub>10</sub>	2.025E-04	0.203	4.250E-04	0.425
Choline Chloride	67-48-1	HOCH <sub>2</sub> CH <sub>2</sub> N(CH <sub>3</sub> ) <sub>3</sub> Cl	1.187E-04	0.119	8.501E-04	0.850
Folic Acid	59-30-3	C <sub>19</sub> H <sub>19</sub> N <sub>7</sub> O <sub>6</sub>	3.752E-04	0.375	8.500E-04	0.850
Niacinamide (Nicotinamide)	98-92-0	C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O	1.038E-04	0.104	8.501E-04	0.850
Pyridoxine Monohydrochloride	58-56-0	C <sub>8</sub> H <sub>11</sub> N <sub>3</sub> O	1.731E-04	0.173	8.418E-04	0.842
Riboflavin (Vitamin B2)	83-88-5	C <sub>17</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub>	3.199E-05	0.032	8.500E-05	8.500E-02
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C <sub>12</sub> H <sub>18</sub> N <sub>4</sub> O <sub>4</sub> S	2.867E-04	0.287	8.499E-04	0.850
Phenol Red	34487-61-1	C <sub>19</sub> H <sub>14</sub> O <sub>5</sub> S	1.700E-02	17.000	4.516E-02	45.165
DMSO, Methyl Sulfoxide	67-68-5	(CH <sub>3</sub> ) <sub>2</sub> SO	15%		N/A	