

Media Formulation

RPMI 1640 Medium



Version 1.0
Released Date: April 13, 2026

Cat. No. TM503

Store at 2-8°C, protect from light.
Shelf life: 18 months from date of manufacture.

Component	Molecular Weight (g/mol)	Concentration (mg/L)	Concentration (mM)
Amino Acids			
Glycine	75.0	10.0	0.133
L-Arginine	174.0	200.0	1.149
L-Asparagine	132.0	50.0	0.379
L-Aspartic Acid	133.0	20.0	0.150
L-Cysteine • 2HCl	313.0	65.0	0.208
L-Glutamic Acid	147.0	20.0	0.136
L-Glutamine	146.0	300.0	2.055
L-Histidine	155.0	15.0	0.097
L-Hydroxyproline	131.0	20.0	0.153
L-Isoleucine	131.0	50.0	0.382
L-Leucine	131.0	50.0	0.382
L-Lysine • HCl	183.0	40.0	0.219
L-Methionine	149.0	15.0	0.101
L-Phenylalanine	165.0	15.0	0.091
L-Proline	115.0	20.0	0.174
L-Serine	105.0	30.0	0.286
L-Threonine	119.0	20.0	0.168
L-Tryptophan	204.0	5.0	0.025
L-Tyrosine Disodium Salt Dihydrate	261.0	29.0	0.111
L-Valine	117.0	20.0	0.171
Vitamins			
Biotin	244.0	0.2	8.20×10 ⁻⁴
Choline Chloride	140.0	3.0	0.021
D-Calcium Pantothenate	477.0	0.3	5.24×10 ⁻⁴
Folic Acid	441.0	1.0	0.002
Niacinamide	122.0	1.0	0.008

Para-Aminobenzoic Acid	137.0	1.0	0.007
Pyridoxine Hydrochloride	206.0	1.0	0.005
Riboflavin	376.0	0.2	5.32×10^{-4}
Thiamine Hydrochloride	337.0	1.0	0.003
Vitamin B12	1355.0	5.0×10^{-3}	3.69×10^{-6}
i-Inositol	180.0	35.0	0.194
Inorganic Salts			
Calcium Nitrate (CaNO_3) ₂ •4•H ₂ O	236.0	100.0	0.423
Magnesium Sulfate (MgSO_4) Anhydrous	120.0	48.8	0.407
Potassium Chloride (KCl)	75.0	400.0	5.333
Sodium Chloride (NaCl)	58.4	6000.0	103.448
Sodium Phosphate Dibasic (Na_2HPO_4) Anhydrous	142.0	800.0	5.635
Sodium Bicarbonate (NaHCO_3)	84.0	2000.0	23.810
Other Components			
D-Glucose (Dextrose)	180.0	2000.0	11.111
Glutathione (Reduced)	307.0	1.0	0.003
Phenol Red, Sodium	376.4	5.0	0.013

Special media modification is available as a Custom Media Service; please contact a technical representative at technical@abmgood.com for more details.