

Media Formulation

Dulbecco's Modified Eagle Medium (DMEM), Low Glucose



Version 1.0
Released Date: April 13, 2026

Cat. No. TM501

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	30.0	0.400
L-Arginine Hydrochloride	211.0	84.0	0.398
L-Cystine 2HCl	313.0	63.0	0.201
L-Glutamine	146.0	584.0	4.000
L-Histidine Hydrochloride-H ₂ O	210.0	42.0	0.200
L-Isoleucine	131.0	105.0	0.802
L-Leucine	131.0	105.0	0.802
L-Lysine hydrochloride	183.0	146.0	0.798
L-Methionine	149.0	30.0	0.201
L-Phenylalanine	165.0	66.0	0.400
L-Serine	105.0	42.0	0.400
L-Threonine	119.0	95.0	0.798
L-Tryptophan	204.0	16.0	0.078
L-Tyrosine Disodium Salt Dihydrate	261.0	104.0	0.398
L-Valine	117.0	94.0	0.803
Vitamins			
Choline Chloride	140.0	4.0	0.029
D-Calcium Pantothenate	477.0	4.0	0.008
Folic Acid	441.0	4.0	0.009
Niacinamide	122.0	4.0	0.033
Pyridoxine Hydrochloride	206.0	4.0	0.019
Riboflavin	376.0	0.4	0.001
Thiamine Hydrochloride	337.0	4.0	0.012
i-Inositol	180.0	7.2	0.040
Inorganic Salts			
Calcium Chloride (anhyd.)	111.0	200.0	1.802
Ferric Nitrate (Fe(NO ₃) ₃ ·9H ₂ O)	404.0	0.1	2.5×10 ⁻⁴
Magnesium Sulfate (anhyd.)	120.0	97.7	0.814
Potassium Chloride (KCl)	75.0	400.0	5.333
Sodium Bicarbonate (NaHCO ₃)	84.0	3700.0	44.048
Sodium Chloride (NaCl)	58.0	6400.0	110.345
Sodium Phosphate Monobasic (NaH ₂ PO ₄ ·H ₂ O)	138.0	125.0	0.906
Other Components			
D-Glucose (Dextrose)	180.0	1000.0	5.556
Phenol Red	376.4	15.0	0.040
Sodium Pyruvate	110.0	110.0	1.000

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