

# Media Formulation

## Iscove's Modified Dulbecco's Medium (IMDM)



Version 1.0  
Released Date: April 13, 2026

### Cat. No. TM505

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)
<b>Amino Acids</b>			
Glycine	75.0	30.0	0.400
L-Alanine	89.0	25.0	0.281
L-Arginine • HCl	211.0	84.0	0.398
L-Asparagine (freebase)	150.0	25.0	0.167
L-Aspartic Acid	133.0	30.0	0.226
L-Cysteine • 2HCl	240.0	91.4	0.381
L-Glutamic Acid	147.0	75.0	0.510
L-Glutamine	146.0	584.0	4.000
L-Histidine Hydrochloride • H <sub>2</sub> 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 • HCl	183.0	146.0	0.798
L-Methionine	149.0	30.0	0.201
L-Phenylalanine	165.0	66.0	0.400
L-Proline	115.0	40.0	0.348
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	0.462
L-Valine	117.0	94.0	0.803
<b>Vitamins</b>			
Biotin	244.0	1.3×10 <sup>-2</sup>	5.33×10 <sup>-5</sup>
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	204.0	4.0	0.020
Riboflavin	376.0	0.4	0.001
Thiamine Hydrochloride	337.0	4.0	0.012
Vitamin B12	1355.0	$1.3 \times 10^{-2}$	$9.59 \times 10^{-6}$
i-Inositol	180.0	7.2	0.040
<b>Inorganic Salts</b>			
Calcium Chloride (CaCl <sub>2</sub> ) Anhydrous	111.0	165.0	1.486
Magnesium Sulfate (MgSO <sub>4</sub> ) Anhydrous	120.0	97.7	0.814
Potassium Chloride (KCl)	75.0	330.0	4.400
Potassium Nitrate (KNO <sub>3</sub> )	101.0	$7.6 \times 10^{-2}$	$7.52 \times 10^{-4}$
Sodium Chloride (NaCl)	58.0	4500.0	77.586
Sodium Phosphate Monobasic (NaH <sub>2</sub> PO <sub>4</sub> • H <sub>2</sub> O)	138.0	125.0	0.901
Sodium Selenite (Na <sub>2</sub> SeO <sub>3</sub> • 5-H <sub>2</sub> O)	263.0	$1.73 \times 10^{-2}$	$6.58 \times 10^{-6}$
Sodium Bicarbonate (NaHCO <sub>3</sub> )	84.0	3024.0	36.000
<b>Other Components</b>			
D-Glucose (Dextrose)	180.0	4500.0	25.000
HEPES (C <sub>8</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub> S)	238.0	5958.0	25.034
Phenol Red, Sodium	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](mailto:technical@abmgood.com) for more details.