

NIDB Medium 9

Minimum Essential Medium (MEM)

- [+] Earle's salt**
- [+] L-Glutamine**
- [+] Glucose**
- [+] Phenol red**
- [+] Sodium bicarbonate**
- [-] HEPES**
- [-] Sodium Pyruvate**

0.1 μ m sterile filtered

*MEM is commercially available from ThermoFisher – Gibco
Cat No.: 11095

MEM formulation

Component	Concentration (mg/L)	mM
Amino acid		
L-Arginine hydrochloride	126	0.5972
L-Cystine 2HCl	31	0.0990
L-Glutamine	292	2.0000
L-Histidine hydrochloride-H ₂ O	42	0.2000
L-Isoleucine	52	0.3969
L-Leucine	52	0.3969
L-Lysine hydrochloride	73	0.3989
L-Methionine	15	0.1007
L-Phenylalanine	32	0.1939
L-Threonine	48	0.4034
L-Tryptophan	10	0.0490
L-Tyrosine disodium salt dihydrate	52	0.1992
L-Valine	46	0.3932
Inorganic salts		
Calcium Chloride (CaCl ₂) (anhyd.)	200	1.8018
Magnesium Sulfate (MgSO ₄) (anhyd.)	97.67	0.8139
Potassium Chloride (KCl)	400	5.3333
Sodium Bicarbonate (NaHCO ₃)	2200	26.1905
Sodium Chloride (NaCl)	6800	117.2414
Sodium Phosphate monobasic (NaH ₂ PO ₄ -H ₂ O)	140	1.0145
Vitamins		
Choline chloride	1	0.00714
D-Calcium pantothenate	1	0.00210
Folic Acid	1	0.00227
Niacinamide	1	0.00820
Pyridoxal hydrochloride	1	0.00490
Riboflavin	0.1	0.00027
Thiamine hydrochloride	1	0.00297
i-Inositol	2	0.01111
Other		
D-Glucose (Dextrose)	1000	5.5556
Phenol Red	10	0.0266