

Product Information

RPMI-1640 Medium, Dutch Modification

RPMI-1640 medium was developed by Moore et al., at Roswell Park Memorial Institute, hence the acronym RPMI. The formulation is based on the RPMI-1630 series of media utilizing a bicarbonate buffering system and alterations in the amounts of amino acids and vitamins.

RPMI-1640 medium has been used for the culture of human normal and neoplastic leukocytes. RPMI-1640 when properly supplemented, has demonstrated wide applicability for supporting growth of many types of cell cultures, including fresh human lymphocytes in the 72-hour phytohemagglutinin (PHA) stimulation assay.

References

1. Moore, G.E., et al., Culture of Normal Human Leukocytes. *J.A.M.A.*, **199**, 519-524 (1967).
2. Moore, G.E., and Woods L.K., Culture Media for Human Cells - RPMI 1603, RPMI 1634, RPMI 1640 and GEM 1717. *Tissue Culture Association Manual*, **3**, 503-508 (1976).
3. Moore, G.E., et al., Studies of Normal and Neoplastic Cells. Studies of Normal and Neoplastic Human Hematopoietic Cells *In Vitro*. Twenty-first Annual Symposium on Fundamental Cancer Research, February, 41-63 (1967).
4. Moore, G.E., and Kitamura, H., Cell Line Derived from Patient with Myeloma. *NY State Journal of Medicine*, **68**, 2054-2060 (1968).

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	R7638
	[1x]
COMPONENT	g/L
Inorganic Salts	
Ca(NO ₃) ₂ • 4H ₂ O	0.1
MgSO ₄ (anhydrous)	0.04884
KCl	0.4
NaHCO ₃	1
NaCl	6.4
Na ₂ HPO ₄ (Anhydrous)	0.8
Amino Acids	
L-Arginine • HCl	0.2
L-Asparagine • H ₂ O	0.05
L-Aspartic Acid	0.02
L-Cystine • 2HCl • H ₂ O	0.0652
L-Glutamic Acid	0.02
Glycine	0.01
L-Histidine • HCl • H ₂ O	0.015
Hydroxy-L-Proline	0.02
L-Isoleucine	0.05
L-Leucine	0.05
L-Lysine • HCl	0.04
L-Methionine	0.015
L-Phenylalanine	0.015
L-Proline	0.02
L-Serine	0.03
L-Threonine	0.02
L-Tryptophan	0.005
L-Tyrosine • 2Na • 2H ₂ O	0.02883
L-Valine	0.02
Vitamins	
D-Biotin	0.0002
Choline Chloride	0.003
Folic Acid	0.001
myo-Inositol	0.035
Niacinamide	0.001
p-Aminobenzoic Acid	0.001
D-Pantothenic Acid • ½Ca	0.00025
Pyridoxine • HCl	0.001
Riboflavin	0.0002
Thiamine • HCl	0.001
Vitamin B ₁₂	0.000005
Other	
D-Glucose	2
Glutathione (reduced)	0.001
Phenol Red • Na	0.0053
HEPES	4.77
ADD	
L-Glutamine	0.3