

**Catalog Number:**

M30250

**Size:**

500 mL

## PRODUCT DESCRIPTION

RPMI 1640 Medium was developed for culturing human leukocytes and other blood cells. It contains several additional components when compared to MEM and DMEM. RPMI 1640 is now used for a range of mammalian cells in suspension and monolayer culture. RPMI 1640 is manufactured as enriched medium with or without L-glutamine, with or without a stable L-glutamine substitute, or with or without HEPES. RPMI 1640 requires supplementation with serum, typically 10% Fetal Bovine Serum (FBS), since this medium does not contain proteins, lipids, or growth factors.

Each lot of RPMI 1640 is prepared from a powdered base medium and tissue culture-grade water. Representative samples of each lot of RPMI 1640 are tested to confirm the absence of bacterial or fungal contamination using methods adapted from the current U.S. Pharmacopeia. RPMI 1640 is manufactured in our ISO 9001:2015 certified facility.

For the specific media formulation, please refer to the Media Formulation section of the datasheet.

## STORAGE AND HANDLING

RPMI 1640 is supplied in gamma-irradiated, sterile PETG or PETE bottles. We recommend that RPMI 1640 be stored at a temperature of 2-8 °C, and protected from strong light. Always use aseptic techniques when handling and supplementing RPMI 1640.

## PRECAUTION

When handling bio-hazardous materials such as human cells, safe laboratory procedures should be followed, and personal protective equipment should be worn.

## LIMITATIONS

- FOR LABORATORY RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
- The safety and efficacy of this product in diagnostic or other clinical uses has not been established.
- Results may vary due to variations among tissue/cells derived from different donors or sources.

# MEDIA FORMULATION

## INORGANIC SALTS

mg/L

Calcium Nitrate • 4H <sub>2</sub> O	100.00
Magnesium Sulfate (Anhydr.)	48.83
Potassium Chloride	400.00
Sodium Chloride	5300.00
Sodium Phosphate, Dibasic (Anhydr.)	800.49

## AMINO ACIDS

mg/L

L-Arginine • HCl	241.86
L-Asparagine	50.00
L-Aspartic Acid	20.00
L-Cystine • 2HCl	65.19
L-Glutamic Acid	20.00
L-Glutamine	300.00
Glycine	10.00
L-Histidine • HCl • H <sub>2</sub> O	20.27
L-Isoleucine	50.00
L-Leucine	50.00
L-Lysine • HCl	40.00
L-Methionine	15.00
L-Phenylalanine	15.00
L-Proline	20.00
L-Serine	30.00
L-Threonine	20.00
<i>trans</i> -4-Hydroxy-L-Proline	20.00
L-Tryptophan	5.00
L-Tyrosine • Na <sub>2</sub> • 2H <sub>2</sub> O	28.83
L-Valine	20.00

## VITAMINS

mg/L

para-Aminobenzoic Acid	1.00
D-Biotin	0.20
Choline Chloride	3.00
Folic Acid	1.00
myo-Inositol	35.00
Nicotinamide	1.00
D-Pantothenic Acid, Hemicalcium Salt	0.25
Pyridoxine • HCl	1.00
Riboflavin	0.20
Thiamine • HCl	1.00
Vitamin B12	0.005

## OTHER COMPONENTS

mg/L

D-Glucose	2000.00
Glutathione (reduced)	1.00
HEPES	5958.00
Phenol Red • Na	5.10
Sodium Bicarbonate	2000.00