RPMI1640 Medium (ATCC*)

*ATCC: American Type Culture Collection | With 2 mM L-Glutamine, 10 mM HEPES, 1 mM Sodium Pyruvate, 4500 mg/L D-Glucose, 1500 mg/L Sodium Bicarbonate

Cat. No. CPR003 | Size: 500 ML / 1L

1. Product Description

RPMI (Roswell Park Memorial Institute) 1640 Medium was originally developed to culture human leukemic cells, but is now known to be suitable for culturing HeLa, Jurkat, MCF-7, PC12, PBMC, astrocytes, and carcinomas. RPMI1640 medium is characterized by containing components not found in Eagle's Media (such as MEM, DMEM, etc.) like glutathione, biotin, vitamin B12, and PABA. In particular, this product (Cat. No. CPR003) is formulated with the exact composition as ATCC (American Type Culture Collection) RPMI1640.

2. Composition

Amino Acids	mg/L
L-Arginine	200.0
L-Asparagine·H_2O	56.82
L-Aspartic Acid	20.0
L-Cystine-2HCl	65.2
L-Glutamic Acid	20.0
L-Glutamine	300.0
Glycine	10.0
L-Histidine	15.0
L-Hydroxyproline	20.0
L-Isoleucine	50.0
L-Leucine	50.0
L-Lysine·HCl	40.0
L-Methionine	15.0
L-Phenylalanine	15.0
L-Proline	20.0
L-Serine	30.0
L-Threonine	20.0
L-Tryptophan	5.0
L-Tyrosine-2Na-2H_2O	28.83
L-Valine	20.0

Vitamins	mg/L
Biotin	0.2
D-Ca Pantothenate	0.25
Choline Chloride	3.0
Folic Acid	1.0
i-Inositol	35.0
Niacinamide	1.0
Para-Aminobenzoic Acid	1.0
Pyridoxine-HCl	1.0
Riboflavin	0.2
Thiamine-HCl	1.0
Vitamin B12	0.005

Inorganic Salts	mg/L
$Ca(NO_3)_2·4H_2O$	100.0
KCl	400.0
$MgSO_4$	48.84
NaCl	6000.0
$NaHCO_3$	1500.0
Na_2HPO_4	800.0

Others	mg/L
D-Glucose	4500.0
Glutathione (reduced)	1.0
HEPES	2383.0
Phenol Red-Na	5.0
Sodium Pyruvate	110.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.2 ± 0.2	290 ± 30 mOsm/kg H_2O	< 0.5 EU/ml	Sterile

4. Storage Conditions and Precautions

Store at refrigerated temperatures (2~8°C) protected from direct light. The expiration date is indicated on the product label; do not use expired products. Product degradation during storage may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Storing against the inner walls of a refrigerator where temperatures may approach 0°C can cause degradation due to ice crystal formation. The addition of extra substances may also cause degradation.

5. Usage Instructions and Precautions

This product is a sterile solution. Open the cap only in a sterile environment (e.g., a clean bench) using aseptic technique. It is recommended to use the entire contents after opening; otherwise, aliquot into a suitable sterile container and store refrigerated (2~8°C).