RPMI1640 Medium (Dutch)

Dutch Modification | With 2 mM L-Glutamine, 20 mM HEPES, 2000 mg/L D-Glucose, 1000 mg/L Sodium Bicarbonate

Cat. No. CPR005 | 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. CPR005) is formulated with Dutch Modification; please verify the composition table below before use.

2. Composition

Amino Acids	mg/L
L-Arginine	200.0
L-Asparagine	50.0
L-Aspartic Acid	20.0
L-Cystine-2HCl	65.0
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	29.0
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
$Ca(NO_3)_2 \cdot 4H_2O$	100.0
KCl	400.0
$MgSO_4$	48.84
NaCl	6000.0
$NaHCO_3$	1000.0
Na_2HPO_4	800.0

Others	mg/L
D-Glucose	2000.0
Glutathione (reduced)	1.0
HEPES	4766.0
Phenol Red-Na	5.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.3 ± 0.3	300 ± 15 mOsm/kg H_2O	< 1 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, protect from direct light, and store refrigerated (2~8°C).