RPMI 1640 Medium

Cat. No. CPR002
With L-Glutamine
With 25 mM HEPES
With Sodium Bicarbonate

1. Product Description

RPMI 1640 Medium was originally developed for the culture of human leukemic cells and is now widely used for the culture of various cell types such as HeLa, Jurkat, MCF-7, PC12, PBMC, astrocytes, and carcinomas. It contains unique components such as glutathione, biotin, vitamin B12, and PABA which are not found in Eagle's media. In addition, this product contains 25 mM HEPES to minimize pH fluctuations during cell culture.

2. Composition

Concentration: mg/L

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
$Ca(NO_3)_2·4H_2O$	100.0
KCl	400.0
$MgSO_4$	48.84
NaCl	6000.0
$NaHCO_3$	2000.0
Na_2HPO_4	800.0

Others	mg/L
D-Glucose	2000.0
Glutathione (reduced)	1.0
HEPES	5958.0
Phenol Red	5.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.3 ± 0.3	298 ± 15 mOsm/kg H_2O	< 1 EU/mL	Sterile

4. Storage Conditions and Precautions

Protect from direct light and store refrigerated (2~8℃). Product degradation 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℃ can cause degradation, and additional supplements 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℃).