

Technical Information

RPMI-1640

Without L-Glutamine and Sodium bicarbonate 10X Liquid Cell Culture medium

Product Code:AL1102

Application:-Roswell Park Memorial Institute (RPMI) media are a series of media developed by Moore et al for the culture of human normal and neoplastic cells in vitro. RPMI 1640 is the most commonly used medium in the series. A modification of McCoy's 5A medium, the medium was specifically designed to support the growth of human lymphoblastoid cells in suspension culture. Presently the medium is extensively used for a wide range of anchorage dependant cell lines. The medium needs to be supplemented with 5-20% fetal bovine serum. The medium is also known to support growth of cells in the absence of serum.

AL1102 is a 10X concentrate of RPMI 1640 without Lglutamine and sodium bicarbonate. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition**

Ingredients	mg/Litre
INORGANIC SALTS	
Calcium nitrate tetrahydrate	1000.000
Magnesium sulphate anhydrous	488.400
Potassium chloride	4000.000
Sodium chloride	60000.000
Sodium dihydrogen phosphate anhydrous	8000.000
AMINO ACIDS	
Glycine	100.000
L-Arginine hydrochloride	2410.000
L-Asparagine	500.000
L-Aspartic acid	200.000
L-Cystinedihydrochloride	652.000
L-Glutamic acid	200.000
L-Histidine hydrochloride monohydrate	209.600
L-Hydroxyproline	200.000
L-Isoleucine	500.000
L-Leucine	500.000
L-Lysine hydrochloride	400.000
L-Methionine	150.000
L-Phenylalanine	150.000
L-Proline	200.000
L-Serine	300.000
L-Threonine	200.000
L-Tryptophan	50.000
L-Tyrosine disodium salt	288.300
L-Valine	200.000
VITAMINS	
Choline chloride	30.000
D-Biotin	2.000

D-Ca-Pantothenate	2.500
Folic acid	10.000
Niacinamide	10.000
Pyridoxine hydrochloride	10.000
Riboflavin	2.000
Thiamine hydrochloride	10.000
Vitamin B12	0.05
i-Inositol	350.000
p-Amino benzoic acid (PABA)	10.000
OTHERS	
D-Glucose	20000.000
Glutathione reduced	10.000
Phenol red sodium salt	53.000

Methodology

1. Add 26.7ml of 7.5% sodium bicarbonate solution (TCL1013) and 10.3ml of 200mM L-glutamine solution (TCL1012) to 1X medium prior to use

Material required but not provided

L-Glutamine solution 200mM (TCL1012) Sodium bicarbonate solution 7.5% (TCL1013)

Quality control

Appearance

Yellow to orange colored, clear solution.

pH

4.70 -5.30

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through minimum three subcultures.

Endotoxin Content

NMT 5EU/ml

Storage and Shelf Life

Store at 2-8°C away from bright light. Shelf life is 18 months. Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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