

RPMI-1640

**With 2mM L-Glutamine, 4.5gms Glucose per litre, 10mM HEPES, 1.5gms per litre Sodium bicarbonate and 1mM Sodium pyruvate
1X Liquid Cell Culture medium**

Product Code: AL162S

Product Description :

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.

AL162S is RPMI 1640 with L-glutamine, 4.5gms per litre glucose, 10mM HEPES, 1.5gms per litre sodium bicarbonate and sodium pyruvate. HEPES, a zwitterionic buffer having a pKa of 7.3 at 37°C prevents the initial rise in pH that tends to occur at the initiation of a culture and increases the buffering capacity of the medium. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition :

| Ingredients | mg/L |
|------------------------------------|----------|
| INORGANIC SALTS | |
| Calcium nitrate tetrahydrate | 100.000 |
| Magnesium sulphate anhydrous | 48.840 |
| Potassium chloride | 400.000 |
| Sodium bicarbonate | 1500.000 |
| Sodium chloride | 6000.000 |
| Sodium phosphate dibasic anhydrous | 800.000 |
| AMINO ACIDS | |
| Glycine | 10.000 |
| L-Arginine hydrochloride | 241.850 |
| L-Asparagine | 50.000 |
| L-Aspartic acid | 20.000 |
| L-Cystine dihydrochloride | 65.200 |

| | |
|---------------------------------------|----------|
| L-Glutamic acid | 20.000 |
| L-Glutamine | 300.000 |
| L-Histidine hydrochloride monohydrate | 20.260 |
| L-Hydroxyproline | 20.000 |
| L-Isoleucine | 50.000 |
| L-Leucine | 50.000 |
| L-Lysine hydrochloride | 40.000 |
| L-Methionine | 15.000 |
| L-Phenylalanine | 15.000 |
| L-Proline | 20.000 |
| L-Serine | 30.000 |
| L-Threonine (Allo free) | 20.000 |
| L-Tryptophan | 5.000 |
| L-Tyrosine disodium salt | 24.850 |
| L-Valine | 20.000 |
| VITAMINS | |
| Choline chloride | 3.000 |
| D-Biotin | 0.200 |
| D-Ca-Pantothenate | 0.250 |
| Folic acid | 1.000 |
| Niacinamide | 1.000 |
| Pyridoxine hydrochloride | 1.000 |
| Riboflavin | 0.200 |
| Thiamine hydrochloride | 1.000 |
| Vitamin B12 | 0.005 |
| i-Inositol | 35.000 |
| p-Amino benzoic acid (PABA) | 1.000 |
| OTHERS | |
| D-Glucose | 4500.000 |
| Glutathione reduced | 1.000 |
| HEPES Buffer | 2383.000 |
| Phenol red sodium salt | 5.300 |
| Sodium pyruvate | 110.000 |

Quality Control:

Appearance

Orangish red colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

280.00 -320.00

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 1EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light.

Shelf life is 12 months.

Use before expiry date given on the product label.

Revision : 1 / 2011

Disclaimer :

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