

RPMI-1640

**With 25mM HEPES buffer and Sodium bicarbonate
Without L-Glutamine**

Product Code: AL060

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.

AL060 is RPMI-1640 medium supplemented with 25mM HEPES buffer and sodium bicarbonate. It does not contain L-glutamine. 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 |
| Disodium hydrogen phosphate anhydrous | 800.000 |
| Magnesium sulphate anhydrous | 48.840 |
| Potassium chloride | 400.000 |
| Sodium bicarbonate | 2000.000 |
| Sodium chloride | 6000.000 |
| AMINO ACIDS | |
| Glycine | 10.000 |
| L-Arginine hydrochloride | 241.000 |
| L-Asparagine monohydrate | 50.000 |
| L-Aspartic acid | 20.000 |
| L-Cystine dihydrochloride | 65.200 |
| L-Glutamic acid | 20.000 |

| | |
|---------------------------------------|----------|
| L-Histidine hydrochloride monohydrate | 20.960 |
| 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 | 20.000 |
| L-Tryptophan | 5.000 |
| L-Tyrosine disodium salt dihydrate | 28.830 |
| 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 | 2000.000 |
| Glutathione reduced | 1.000 |
| HEPES Buffer | 5958.000 |
| Phenol red sodium salt | 5.300 |

Directions:

1. Add 10.3ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012)

Quality Control:**Appearance**

Orange colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

320.00 -360.00

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.

Endotoxin Content

NMT 1EU/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 :

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