

## HiGlutaXL™ RPMI-1640

With L-Alanyl-L-Glutamine, HEPES buffer and Sodium bicarbonate  
1X Liquid Cell Culture Medium

**Product Code: AL060G**

### Product Description :

HiGlutaXL™ medium contains the stabilised dipeptide form of L-Glutamine, L-Alanyl-L-Glutamine. HiGlutaXL™ medium offers several advantages over the conventional glutamine containing media. Dipeptide form prevents the intramolecular cyclization reaction, thus preventing toxic build-up of ammonia. L-Alanyl-L-Glutamine incorporates L-Alanine that protects the alpha amino acid group. Aminopeptidases within the cell break the dipeptide, gradually releasing both L-Glutamine and L-Alanine for use by the cell. The gradual release of L-Glutamine obviates the need to supplement L-Glutamine frequently and allows liquid media to be stored at 4°C for longer periods.

AL060G is HiGlutaXL™ RPMI-1640 medium supplemented with 25mM HEPES buffer, L-alanyl-L-glutamine and sodium bicarbonate. 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
<b>INORGANIC SALTS</b>	
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
<b>AMINO ACIDS</b>	
Glycine	10.000
L-Alanyl-L-Glutamine	446.000
L-Arginine hydrochloride	241.000
L-Asparagine anhydrous	50.000

L-Aspartic acid	20.000
L-Cystine dihydrochloride	65.200
L-Glutamic acid	20.000
L-Histidine hydrochloride	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 sodium salt	28.830
L-Valine	20.000
<b>VITAMINS</b>	
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
<b>OTHERS</b>	
D-Glucose	2000.000
Glutathione reduced	1.000
HEPES Buffer	5958.000
Phenol red sodium salt	5.300

### Quality Control:

#### Appearance

Orange colored, clear solution.

**pH**

7.00 -7.60

**Osmolality in mOsm/Kg H<sub>2</sub>O**

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 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.

Revision : 1 / 2011

**Disclaimer :**

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