



Technical Datasheet

HiGlutaXL™ RPMI-1640

With L-Alanyl-L-Glutamine, HEPES buffer and Sodium bicarbonate

Product Code: AL060G

Product Description:

HiGlutaXLTM medium contains stabilised dipeptide form of L-Glutamine, L-Alanyl-L-Glutamine. HiGlutaXLTM 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 HiGlutaXLTM 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
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-Alanyl-L-Glutamine	446.000
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 sodium 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
	2.500

Quality Control:

Appearance

Orange colored, clear solution.

pН

7.00 - 7.60

Osmolality in mOsm/Kg H2O

265.00 - 305.00

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: Revision: 04/2025

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