



Product Code : AL028G

RPMI 1640

With L-Alanyl-L-Glutamine and Sodium bicarbonate

Product Information

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.

AL028G is HiGlutaXL™ RPMI 1640 with L-alanyl-L-glutamine 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	Milligrams/Litre
Calcium nitrate tetrahydrate	100.00
Magnesium sulphate anhydrous	48.84
Potassium chloride	400.00
Sodium chloride	6,000.00
Sodium phosphate, dibasic anhydrous	800.00
D-Glucose	2,000.00
Glutathione reduced	1.00
Phenol red .Na salt	5.30
L-Arginine Hydrochloride	241.00
L-Asparagine	50.00
L-Aspartic acid	20.00
L-Cystine dihydrochloride	65.20
L-Glutamic acid	20.00
L-Alanyl-L-Glutamine	446.00
Glycine	10.00
L-Histidine Hydrochloride monohydrate	20.96
L-Hydroxyproline	20.00
L-Isoleucine	50.00
L-Leucine	50.00
L-Lysine hydrochloride	40.00
L-Methionine	15.00
L-Phenylalanine	15.00
L-Proline	20.00
L-Serine	30.00
L-Threonine	20.00
L-Tryptophan	5.00

L-Tyrosine (Na Salt)	28.83
L-Valine	20.00
D-Biotin	0.20
D-Ca-Pantothenate	0.25
Choline chloride	3.00
Folic acid	1.00
i-Inositol	35.00
Niacinamide	1.00
p-Amino benzoic acid (PABA)	1.00
Thiamine hydrochloride	1.00
Vitamin B ₁₂	0.005
Pyridoxine hydrochloride	1.00
Riboflavin	0.20
Sodium bicarbonate	2000.00

Quality control :

Appearance	: Orangish red clear solution
pH at 25°C	: 7.3± 0.3
Osmolality	: 290- 330 mOsm/ KgH ₂ O
Endotoxin	: Less than 5EU/ml
Sterility	: No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response :

Growth promotion : The growth promotion capacity of the medium is assessed by supplementing the medium with 10% fetal bovine serum and checking the growth using an appropriate cell line and comparing it with a control medium. Growth promotion studies are carried out through two or more subcultures. The medium is analyzed for its growth supporting property qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts. The medium is also tested for its good anchoring capacity and buffering action.

Toxicity on cell lines: Negative

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.