

# HiGlutaXL™ Iscove's Modified Dulbecco's Medium

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

**Product Code: AL070G**

## Product Description :

HiGlutaXL™ medium contains the stabilized 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.

AL070G is HiGlutaXL™ Iscove's Modified Dulbecco's Medium with L-alanyl-L-glutamine, 25mM HEPES buffer 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 chloride dihydrate	219.000
Magnesium sulphate anhydrous	97.720
Potassium chloride	330.000
Potassium nitrate	0.076
Sodium bicarbonate	3204.000
Sodium chloride	4505.000
Sodium dihydrogen phosphate, anhydrous	109.000
Sodium selenite	0.0173
<b>AMINO ACIDS</b>	
Glycine	30.000
L-Alanine	25.000
L-Alanyl-L-Glutamine	868.000
L-Arginine hydrochloride	84.000

L-Asparagine	25.000
L-Aspartic acid	30.000
L-Cystine dihydrochloride	91.240
L-Glutamic acid	75.000
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	104.800
L-Leucine	104.800
L-Lysine hydrochloride	146.200
L-Methionine	30.000
L-Phenylalanine	66.000
L-Proline	40.000
L-Serine	42.000
L-Threonine	95.200
L-Tryptophan	16.000
L-Tyrosine disodium salt	104.200
L-Valine	93.600
<b>VITAMINS</b>	
Choline chloride	4.000
D-Biotin	0.013
D-Ca-Pantothenate	4.000
Folic acid	4.000
Nicotinamide	4.000
Pyridoxal hydrochloride	4.000
Riboflavin	0.400
Thiamine hydrochloride	4.000
Vitamin B12	0.013
i-Inositol	7.200
<b>OTHERS</b>	
D-Glucose	4500.000
HEPES Buffer	5958.000
Phenol red sodium salt	15.000
Sodium pyruvate	110.000

## Quality Control:

### Appearance

Orangish red colored, clear solution.

### pH

7.00 - 7.60

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

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 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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