

Technical Information

MiGlutaXL Dulbecco's Modified Eagle Medium/Nutrient Mixture F-12 Ham (DMEM/F12, 1:1 Mixture)

With L-Alanyl-L-Glutamine & 2.438gms/Lt Sodium bicarbonate Without HEPES buffer & Trace elements

Product Code: AL1155G

Application:- MiGlutaXL medium contains the stabilised dipeptide form of L-glutamine, L-alanyl-L-glutamine. MiGlutaXL 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.

AL1155G is MiGlutaXL DMEM/Nutrient Mixture F-12 Ham with L-alanyl-L-glutamine and 2.438gms per litre sodium bicarbonate. It does not contain trace elements and HEPES buffer. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition**

Ingredients	mg/Litre
INORGANIC SALTS	
Calcium chloride dihydrate	154.500
Copper sulphate pentahydrate	0.0013
Disodium hydrogen phosphate	71.020
Ferric nitrate nonahydrate	0.050
Ferrous sulphate heptahydrate	0.417
Magnesium chloride hexahydrate	61.200
Manganese sulphate	0.000151
Magnesium sulphate anhydrous	48.840
Potassium chloride	311.800
Sodium bicarbonate	2438.00
Sodium chloride	6996.000
Sodium dihydrogen phosphate	54.300
Zinc sulphate heptahydrate	0.432
AMINO ACIDS	
Glycine	18.750
L-Alanine	4.450
L-Alanyl-L-Glutamine	543.000
L-Arginine hydrochloride	147.500
L-Asparagine monohydrate	7.500
L-Aspartic acid	6.650
L-Cysteine hydrochloride monohydrate	17.560
L-Cystine dihydrochloride	31.210
L-Glutamic acid	7.350
L-Histidine hydrochloride monohydrate	31.480
L-Isoleucine	54.470

L-Leucine	59.050
L-Lysine hydrochloride	91.250
L-Methionine	17.240
L-Phenylalanine	358.480
L-Proline	17.250
L-Serine	26.250
L-Threonine	53.450
L-Tryptophan	9.020
L-Tyrosine sodium salt dihydrate	48.100
L-Valine	52.850

VITAMINS

Choline chloride	8.980
D-Biotin	0.0035
D-Ca-Pantothenate	2.240
Folic acid	2.660
Niacinamide	2.020
Pyridoxal hydrochloride	2.000
Pyridoxine hydrochloride	0.031
Riboflavin	0.219
Thiamine	2.170
Vitamin B12	0.680
myo-Inositol	12.600

OTHERS

D-Glucose	3151.00
DL-Thioctic acid	0.105
Hypoxanthine sodium salt	2.400
Linoleic acid	0.042
Phenol red sodium salt	8.630
Putrescine hydrochloride	0.081
Sodium pyruvate	110.000
Thymidine	0.365

Quality control

Appearance :

Red colored, clear solution

pH :

7.00 -7.60

Osmolality in mOsm/Kg H₂O

320.0 -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 12 months. Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
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