



William's Medium E

With Sodium bicarbonate

Without Phenol red and L-Glutamine

Product Code: AL240

Product Description:

William's Medium E was developed by Williams and Gunn for the isolation and long term maintenance of adult rat liver epithelial cells. The medium is a rich modification of William's medium D and was developed during studies performed to explore the possibilities of culturing adult liver cells on a long-term basis.

AL240 is William's Medium with sodium bicarbonate. It does not contain L-glutamine and phenol red. 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 chloride dihydrate	265.000
Copper sulphate pentahydrate	0.0001
Ferric nitrate nonahydrate	0.0001
Magnesium sulphate anhydrous	97.670
Manganese chloride tetrahydrate	0.0001
Potassium chloride	400.000
Sodium bicarbonate	2200.00
Sodium chloride	6800.000
Sodium dihydrogen phosphate anhydrous	122.000
Zinc sulphate heptahydrate	0.0002
AMINO ACIDS	
Glycine	50.000
L-Alanine	90.000
L-Arginine hydrochloride	60.460
L-Asparagine monohydrate	20.000
L-Aspartic acid	30.000
L-Cysteine hydrochloride monohydrate	57.986
L-Cystine dihydrochloride	26.070
L-Glutamic acid	44.500
L-Histidine hydrochloride monohydrate	16.409
L-Isoleucine	50.000
L-Leucine	75.000

L-Lysine hydrochloride	87.460
L-Methionine	15.000
L-Phenylalanine	25.000
L-Proline	30.000
L-Serine	10.000
L-Threonine	40.000
L-Tryptophan	10.000
L-Tyrosine disodium dihydrate	50.650
L-Valine	50.000
VITAMINS	
Ascorbic acid sodium salt	2.270
Calciferol	0.100
Choline chloride	1.500
D-Biotin	0.500
D-Ca-Pantothenate hemicalcium	1.000
Folic acid	1.000
Menadione sodium bisulphite	0.010
Niacinamide	1.000
Pyridoxal hydrochloride	1.000
Retinol acetate	0.100
Riboflavin	0.100
Thiamine hydrochloride	1.000
Vitamin B12	0.200
myo-Inositol	2.000
OTHERS	
Alpha Tocopherol phosphate disodium salt	0.010
D-Glucose	2000.000
Glutathione reduced	0.050
Methyl linoleate	0.030
Sodium pyruvate	25.000

Directions:

1. Add 10ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:

L-Glutamine solution 200mM (TCL012)

Quality Control:**Appearance**

Clear solution, with yellow tinge.

pH

7.00 - 7.60

Osmolality in mOsm/Kg H₂O

290.00 - 330.00

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 : 05/2025

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic , research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.