CDH

Product Specification

cdhfinechemical.com

Technical Information

Iscove's Modified Dulbecco's Medium (IMDM)

With 25mM HEPES Buffer and Sodium bicarbonate Without L-Glutamine 1X Liquid Cell Culture Medium

Product Code: AL1070

Application:- Iscove's Modified Dulbecco's Medium (IMDM) is an enriched modification of Dulbecco's Modified Eagle's Medium wherein serum can be partially or totally replaced by chemically defined substances. The medium contains additional amino acids, sodium selenite, sodium pyruvate, vitamins and inorganic salts. Potassium nitrate is substituted by ferric nitrate. IMDM was the first medium utilizing HEPES buffer. The medium when appropriately supplemented supports good growth of precursor cells of erythrocytes and macrophages. The medium also supports good growth of T and B lymphocytes and a variety of hybrid cells under serum free or reduced serum conditions.
AL1070 is Iscove's Modified Dulbecco's Medium with 25mM HEPES buffer and sodium bicarbonate. It does not contain L-glutamine. HEPES, a zwitterionic buffer having a pKa of 7.3 at 37ºC 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 / Litre
INORGANIC SALTS	
Calcium chloride dihydrate	219.000
Magnesium sulphate anhydrous	97.720
Potassium chloride	330.000
Potassium nitrate	0.076
Sodium bicarbonate	3024.000
Sodium chloride	4505.000
Sodium dihydrogen phosphate anhydrous	109.000
Sodium selenite	0.0173
AMINO ACIDS	
Glycine	30.000
L-Alanine	25.000
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

CDH

Product Specification

cdhfinechemical.com

VITAMINS	
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
OTHERS	
D-Glucose	4500.000
HEPES Buffer	5958.000
Phenol red sodium salt	15.000
Sodium pyruvate	110.000

Methodology

1. Add 20ml of 200mM L-glutamine (TCL1012) for 1 litre of medium.

Material required but not provided

L-Glutamine solution 200mM (TCL1012)

Quality control

Appearance

Orangish red colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H_2O

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.

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.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.

Product Specification

cdhfinechemical.com

- 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.
- Do not use the products if it fails to meet specifications for identity and performance parameters.