

Technical Datasheet

Iscove's Modified Dulbecco's Medium (IMDM)

With L-Glutamine, 25mM HEPES Buffer and Sodium bicarbonate Hybridoma Tested

Product Code: AL070H

Product Description:

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.

AL070H is Iscove's Modified Dulbecco's Medium with 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. This medium is also Hybridoma tested. 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 | 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-Glutamine | 584.000 |
| 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 |
| 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 |

Quality Control:

Appearance

Orangish red colored, clear solution.

pН

7.00 - 7.60

Osmolality in mOsm/Kg H_2O

270.00 - 310.00

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 :

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