Iscove’s Modified Eagle Medium (IMDM)

w/ L-Glutamine, 25mM HEPES Buffer and 3.024gms per litre Sodium bicarbonate
w/o Phenol red
1X Liquid Cell Culture Medium

Product Code: AL205A

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.

AL205A is Iscove's Modified Dulbecco's Medium with L-glutamine, 25mM HEPES Buffer and 3.024gms per litre Sodium bicarbonate. 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. It does not contain 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     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
Sodium pyruvate             110.000

Quality Control:

Appearance
Colorless clear solution.

pH
7.00 - 7.60
**Osmolality in mOsm/Kg H2O**
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 12 months.
Use before expiry date given on the product label.