IMDM (ATCC) (Iscove's Modified Dulbecco's Medium, ATCC Formulation)

With 4 mM L-Glutamine, 25 mM HEPES, 1500 mg/L Sodium Bicarbonate (Without α-Thioglycerol & 2-Mercaptoethanol)

Cat. No. CPI002 | Size: 500 ML / 1L

1. Product Description

IMDM is a medium developed to enable the culture of erythrocyte and macrophage precursor cells by reinforcing amino acids, vitamins, pyruvate, and HEPES in DMEM (Dulbecco's Modified Eagle's Medium), adding selenium, and adding potassium nitrate instead of ferric nitrate. IMDM is used for research on various B lymphocytes (and hybrid cells) as well as Jurkat, COS-7, and macrophage cells. This product (Cat. No. CPI002) has the exact same formulation as the ATCC (American Type Culture Collection) formulation.

2. Composition

Amino Acids	mg/L
L-Alanine	25.0
L-Arginine-HCl	84.0
L-Asparagine	25.0
L-Aspartic Acid	30.0
L-Cystine-2HCl	91.4
L-Glutamic Acid	75.0
L-Glutamine	584.0
Glycine	30.0
L-Histidine-HCl-H_2O	42.0
L-Isoleucine	105.0
L-Leucine	105.0
L-Lysine-HCl	146.0
L-Methionine	30.0
L-Phenylalanine	66.0
L-Proline	40.0
L-Serine	42.0
L-Threonine	95.0
L-Tryptophan	16.0
L-Tyrosine-2Na	104.0
L-Valine	94.0

Vitamins & Salts	mg/L
Biotin	0.013
D-Ca Pantothenate	4.0
Choline Chloride	4.0
Folic Acid	4.0
i-Inositol	7.2
Niacinamide	4.0
Pyridoxal-HCl	4.0
Riboflavin	0.4
Thiamine-HCl	4.0
Vitamin B12	0.013
Inorganic Salts	**mg/L**
$CaCl_2$	165.0
KCl	330.0
KNO_3	0.08
$MgSO_4$	97.67
NaCl	4505.0
$NaHCO_3$	1500.0
$NaH_2PO_4 \cdot H_2O$	125.0
Na_2SeO_3	0.02

Others	mg/L
D-Glucose	4500.0
HEPES	5958.0
Phenol Red	15.0
Sodium Pyruvate	110.0

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.2 ± 0.2	272 ± 37 mOsm/kg H_2O	<0.5 EU/mL	Sterile

4. Storage Conditions and Precautions

Store at refrigerated temperatures (2~8°C) protected from direct light. The expiration date is indicated on the product label; do not use expired products. Product degradation may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Storing against the inner walls of a refrigerator where temperatures may approach 0°C can cause degradation due to ice crystal formation. The addition of extra substances may also cause degradation.

5. Usage Instructions and Precautions

This product is a sterile solution. Open the cap only in a sterile environment (e.g., a clean bench) using aseptic technique. It is recommended to use the entire contents after opening; otherwise, aliquot into a suitable sterile container and store refrigerated (2~8°C).