IMDM

(Iscove's Modified Dulbecco's Medium)

Cat. No. CPI001

With L-Glutamine
With 25 mM HEPES
With Sodium Bicarbonate
Without α-Thioglycerol, Without 2-Mercaptoethanol

1. Product Description

IMDM is a highly enriched modification of DMEM, formulated with increased concentrations of amino acids, vitamins, pyruvate, and HEPES, supplemented with selenium, and substituting ferric nitrate with potassium nitrate to support the culture of precursor cells for erythrocytes and macrophages. IMDM is widely used for culturing various B lymphocytes (and hybrid cells) as well as Jurkat, COS-7, and macrophage cells.

2. Composition

Concentration: mg/L

Amino Acids	mg/L
L-Alanine	25
L-Arginine·HCl	84
L-Asparagine	25
L-Aspartic Acid	30
L-Cystine·2HCl	91.4
L-Glutamic Acid	75
L-Glutamine	584
Glycine	30
L-Histidine·HCl·H_2O	42
L-Isoleucine	105
L-Leucine	105
L-Lysine·HCl	146
L-Methionine	30
L-Phenylalanine	66
L-Proline	40
L-Serine	42
L-Threonine	95
L-Tryptophan	16
L-Tyrosine·2Na	104
L-Valine	94

Vitamins	mg/L
Biotin	0.01
D-Ca Pantothenate	4
Choline Chloride	4
Folic Acid	4
i-Inositol	7.2
Niacinamide	4
Pyridoxal·HCl	4
Riboflavin	0.4
Thiamine·HCl	4
Vitamin B_{12}	0.01

Others

Others	mg/L
D-Glucose	4500
Phenol Red	15
HEPES	5958
Sodium Pyruvate	110

Inorganic Salts	mg/L
$CaCl_2$	165
KCl	330
KNO_3	0.08
$MgSO_4$	97.67
NaCl	4505
$NaHCO_3$	3024
$NaH_2PO_4·H_2O$	125
Na_2SeO_3	0.02

3. Product Quality Specifications

Appearance	pH	Osmolality	Endotoxin	Sterility
Red clear liquid	pH 7.3 ± 0.3	284 ± 14 mOsm/kg H_2O	< 1 EU/mL	Sterile

4. Storage Conditions and Precautions

Protect from direct light and store refrigerated (2–8°C). 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.

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).