

DMEM/F-12 with L-Glutamine

(with Phenol Red and Sodium Pyruvate and without HEPES)
(Cell Culture Grade)

Ordering info

TBR0319, 500 mL

Description

DMEM/F-12 is a 1:1 mixture of Dulbecco's Modified Eagle Medium (DMEM) and Ham's F-12 Nutrient Mixture, designed to combine the advantages of both formulations into a single, highly versatile basal medium.

The medium is supplemented with **L-Glutamine**, an essential amino acid required for optimal cell growth and metabolism.

DMEM/F-12 is widely used for the cultivation of a broad range of mammalian cells, including epithelial, endothelial, fibroblast, and neuronal cell types.

Features

- Filter sterilized DMEM/F-12 supplemented with L-Glutamine.
- Clear red/orange solution.
- This formulation is with Phenol Red and Sodium Pyruvate and without HEPES.
- pH: 7.0-7.6
- Osmolality: 280-320 mOsm/kg
- Endotoxin: <1.0 EU/ml

Applications

- Cell Culture.

Storage

Store at +4°C, protected from light, for up to 12 months. Once the product has been opened, store at +4°C and use within 1 or 2 months.

Shipment is typically carried out at room temperature as this product can be kept at room temperature for up to 2 weeks without any problem.

Quality Control

- Sterility.
- pH tested.
- Endotoxin levels verified.
- Osmolality tested.

Composition of DMEM/F-12 with L-Glutamine (mg/L)

Amino Acids (mg/L)		Vitamins (mg/L)	
Component	Concentration	Component	Concentration
Glycine	18.75	D-Biotin	0.0035
L-Alanine	4.45	Choline chloride	8.98
L-Arginine HCl	147.50	D-Calcium pantothenate	2.24
L-Asparagine H ₂ O	7.50	Folic Acid	2.66
L-Aspartic Acid	6.65	Myo-Inositol	12.60
L-Cysteine HCl H ₂ O	17.56	Nicotinamide	2.02
L-Cystine 2HCl	31.29	Pyridoxal HCl	2.00
L-Glutamic Acid	7.35	Pyridoxine HCl	0.031
L-Glutamine	365.00	Riboflavin	0.219
L-Histidine HCl H ₂ O	31.48	Thiamine HCl	2.17
L-Isoleucine	54.47	Vitamin B12	0.68
L-Leucine	59.05	Salts (mg/L)	
L-Lysine HCl	91.25	Component	Concentration
L-Methionine	17.24	CaCl ₂ ·2H ₂ O	154.50
L-Phenylalanine	35.48	CuSO ₄ ·5H ₂ O	0.0013
L-Proline	17.25	Fe(NO ₃) ₃ ·9H ₂ O	0.05
L-Serine	26.25	FeSO ₄ ·7H ₂ O	0.417
L-Threonine	53.45	KCl	311.80
L-Tryptophan	9.02	MgCl ₂ ·6H ₂ O	61.20
L-Tyrosine 2Na 2H ₂ O	55.79	MgSO ₄ ·7H ₂ O	100.00
L-Valine	52.85	NaCl	6996.00
Others (mg/L)		NaHCO ₃	1200.00
Component	Concentration	Na ₂ HPO ₄	71.02
D-Glucose	3151.00	NaH ₂ PO ₄ ·2H ₂ O	70.87
Phenol Red (Na)	8.63	ZnSO ₄ ·7H ₂ O	0.432
Hypoxanthine	2.40		
Linoleic Acid	0.042		
Lipoic Acid	0.105		
Putrescine 2 HCl	0.081		
Sodium Pyruvate	55.00		
Thymidine	0.365		