

The User's Manual—DMEM/F12

Basic Information Introduction

Product Introduction

DMEM/F12 (Dulbecco's Modified Eagle Medium) is a widely used basal media containing Glutamine, it can support the growth of a variety of mammalian cell lines.

Application Scope

DMEM/F12 can support the growth of a variety of mammalian cell lines. It can be used in the research and large-scale production of cell culture-based biologics, but cannot be directly used in the human body or used as a medication.



Shipping, Storage and Validity Period

Product	Catalog No.	Storage	Shipping	Validity Period
DMEM/F12	LQ04, Liquid	2°C ~ 8°C, Protect from light	2°C ~ 8°C, Protect from light	12 months
DMEM/F12	DP04, Powder	2°C ~ 8°C, Protect from light	RT, Protect from light	36 months

Protocol for Hydration of Powder Medium

1. Fill the mixing container with purified water (20 ~ 30°C) at 90% of the final volume.
2. Slowly add 12.00 g/L of powder medium with gentle stirring. Mix for 20 minutes.
3. Slowly add 2.438 g/L NaHCO₃ to the solution with gentle stirring, mix for 5 ~ 10 minutes.
4. Adjust the pH to 7.0 ~ 7.6 using 5M NaOH or 1M HCl solution, mix for 10 minutes.
5. Adjust the solution volume to 100% with purified water, mix for 10 minutes.
6. Filter immediately the media with a 0.22 μm membrane filter.

Quality Index of powder and Liquid Media

Product Index	DMEM/F12 (LQ04), Liquid	DMEM/F12 (DP04), Powder
Appearance	Red, clear liquid	Off pink powder
pH	7.0 ~ 7.6	7.0 ~ 7.6 (pre-filter)
Osmolality (mOsmol/kg)	280 ~ 340	280 ~ 340
Solubility	--	Dissolve well according to the protocol for hydration of powder medium
Endotoxin (EU/mL)	< 3	< 3
Sterility	Negative	--
Bioburden	--	Aerobic bacteria: < 200 CFU/g Molds and yeasts: < 50 CFU/g