

Dulbecco's Modified Eagle Medium / Nutrient Mixture F-12 (DMEM/F-12) Powder

Catalogue No.:abx295010

Dulbecco's Modified Eagle Medium / Nutrient Mixture F-12 (DMEM/F-12) powder is a combination of the DMEM and F-12 media. It is widely used fo mammalian cell culture. It contains a high concentration of glucose along with various amino acids, vitamins and inorganic salts essential for cell growth, though does not contain proteins, lipids or growth factors.

The 1 × 10 L size is provided as 1 bottle containing lyophilized powder for 10 L of 1X DMEM/F-12. The 1 × 50 L size is provided as 1 bottle containing lyophilized powder for 50 L of 1X DMEM/F-12.

Target:	Dulbecco's Modified Eagle Medium / Nutrient Mixture F-12 (DMEM/F-12)
Form:	Lyophilized
Reconstitution:	Reconstitute in sterile water.
Storage:	Store at 2-8 °C for up to 3 years. Prepared media can be stored at 2-8 °C for up to 1 year. Avoid exposure to light.
Buffer:	pH 6.2-6.8, containing 3151 mg/L D-Glucose, 2.5 mM L-Glutamine, 8.1 mg/L Phenol Red, 0.5 mM Sodium Pyruvate. Does not contain HEPES, NaHCO3.
Endotoxin Level:	< 1 EU/ml
Concentration:	Prior to lyophilization: 12.04 g/L Osmolality: 240-280 mOsm/kg Turbidity: < 5.0 NTU Loss on drying: < 5%
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.
Directions for use:	 This product should be used with serum (or equivalent) supplementation. Use aseptic techniques to avoid contamination. <u>Preparation:</u> 1. Ensure the final solution is 90% sterile or ultrapure water. 2. Add the water to a sterile container, weigh out the powder at a concentration of 12.0 g/L. 3. Stir for 20 mins to dissolve the powder completely. 4. When the powder has dissolved, add NaHCO3 at a concentration of 2.483 g/L to the container and stir for 5-10 mins until dissolved. 5. Adjust the pH to 7.20-7.30 with 1 mol/L NaHCO₃ or 1 mol HCI. Since filtration slightly increases the pH, the pH provided is slighly lower than the target value. 6. Sterile water can be added to adjust the volume to 100%. 7. Sterilize the final solution using a 0.2 µm pore size filter under positive pressure. 8. Ensure the solution is only stored in glass, culture medium (PET) bottles, or single-use storage bags with an oxygen barrier.