

Product Name

 Name: DMEM, High Glucose, with L-Glutamine, without Sodium Pyruvate, **SLE Grade**

Cat. No.: C3111-0500

Size: 500 mL

Product Description

DMEM, High Glucose, without Sodium Pyruvate, with L-Glutamine is one of the most widely used modifications of Eagle's medium. DMEM is a modification of Basal Medium Eagle (BME) that contains a four-fold higher concentration of amino acids and vitamins. Additionally, the formulation also includes glycine, serine, and ferric nitrate. The original formulation contains 1000 mg glucose per liter and was originally used to culture embryonic mouse cells.

DMEM High Glucose is a further modification of the original DMEM and contains 4500 mg glucose per liter. The additional glucose has proved to be useful in culturing various other cell lines including primary cultures of mouse and chicken cells as well as various normal and transformed cell lines.

DMEM High Glucose is produced to reach the **super-low endotoxin (SLE) grade**, with the endotoxin level ≤ 0.01 EU/mL as measured by the Limulus amoebocyte lysate (LAL) method. The production process and quality management system meet the requirements of cGMP and have passed the ISO 13485 certification.

It does not contain trace elements. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

Composition

Ingredients	mg/L	Ingredients	mg/L
INORGANIC SALTS			
Calcium chloride dihydrate	265.000	Potassium chloride	400.000
Ferric nitrate nonahydrate	0.100	Sodium chloride	6400.000
Magnesium sulphate anhydrous	97.720	Sodium dihydrogen phosphate anhydrous	109.000
AMINO ACIDS			
Glycine	30.000	L-Methionine	30.000
L-Arginine hydrochloride	84.000	L-Phenylalanine	66.000
L-Cystine dihydrochloride	62.570	L-Serine	42.000
L-Glutamine	584.000	L-Threonine	95.000
L-Histidine hydrochloride monohydrate	42.000	L-Tryptophan	16.000
L-Isoleucine	105.000	L-Tyrosine disodium salt	103.790
L-Leucine	105.000	L-Valine	94.000
L-Lysine hydrochloride	146.000		

Vitamins

Choline chloride	4.000	Pyridoxal hydrochloride	4.000
D-Ca-Pantothenate	4.000	Riboflavin	0.400
Folic acid	4.000	Thiamine hydrochloride	4.000
Nicotinamide	4.000	i-Inositol	7.200

OTHERS

D-Glucose	4500.000	Sodium bicarbonate	3700.000
Phenol red Sodium Salt	15.900		

Storage and Stability

The product should be kept at **2 - 8°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 12 months from date of manufacture.

Procedure

1. Take a bottle from the defined storage conditions at 2 - 8°C and read the label.
2. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
3. Pipette the appropriate volume of the product using an aseptic/sterile technique under a laminar-flow culture hood.
4. Add antibiotics or other nutrients if desired.

Quality Control

DMEM, High Glucose, with L-Glutamine, without Sodium Pyruvate, **SLE Grade** is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.