

#### **Product Name**

PI-C3110 V1.0

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

Cat. No.: C3110-0500

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.

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<br>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    | 42.000  | L-Tryptophan                             | 16.000   |
| monohydrate                  |         |  |          |
| 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                               | 4.000    |
| Folic acid                   | 4.000   | Thiamine hydrochloride                   | 4.000    |





|                        |          |                    | PI-C3110 V1.0 |
|------------------------|----------|--------------------|---------------|
| 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 out the appropriate volume using an aseptic/sterile technique under a laminar-flow culture hood.
- 4. Add antibiotics or other nutrients if desired.

### **Quality Control**

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

### Manufacturer

Shanghai Dr. Cell Co., Ltd.

### **Issue Date**

June 2023

### **Precaution and Disclaimer**

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

