

# DMEM, Low Glucose, HEPES, no L-Glutamine, no Sodium Pyruvate

Cat. No.: G4521

## Product Information

| Product Name                                                 | Cat. No.    | Spec.  |
|--------------------------------------------------------------|-------------|--------|
| DMEM, Low Glucose, HEPES, no L-Glutamine, no Sodium Pyruvate | G4521-500ML | 500 mL |

## Product Description/Introduction

Dulbecco's Modified Eagle Medium (DMEM), is a modified medium based on MEM. DMEM is divided into low and high glucose according to the glucose content. DMEM low glucose medium is suitable for the culture of slow metabolizing, dependent adherent cells.

This product contains amino acids, vitamins, inorganic salts and other ingredients required for cell culture, without protein or growth factors. Need to add 5-10% serum or serum-free additives depending on the cell type.

This product is filtered and sterilized by 0.1  $\mu$ m filter membrane, pH 7.0-7.4, contains 5.5 mM D-glucose, 25 mM HEPES buffer system, phenol red indicator, no L-glutamine and sodium pyruvate. HEPES is an excellent biological buffering agent with no toxic effect on cells. The medium supplemented with HEPES can maintain a constant pH range for a long time.

## Storage and Shipping Conditions

Ship at room temperature; Store at 2-8°C, valid for 12 months.

## Note

1. This product has been filtered and sterilized. Attention should be paid to aseptic operation to avoid contamination.
2. Avoid freezing the culture medium. Freezing may cause precipitation and precipitation of nutrients, which may not be completely dissolved after rewarming, affecting the cell culture effect. In addition, when the medium is stored at 2-8°C, do not store it completely close to the inner wall of the refrigerator to prevent the medium from freezing due to localized low temperature.
3. For your safety and health, please wear safety glasses, gloves, or protective clothing.

**For Research Use Only!**

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### DMEM(Low Glucose) Medium Formula

| Components                                 | Concentration |        | Components                                                                          | Concentration |        |
|--------------------------------------------|---------------|--------|-------------------------------------------------------------------------------------|---------------|--------|
|                                            | mg/L          | mM     |                                                                                     | mg/L          | mM     |
| <b>Amino acids</b>                         |               |        | <b>Inorganic salts</b>                                                              |               |        |
| Glycine                                    | 30            | 0.4    | Calcium Chloride (CaCl <sub>2</sub> )(anhyd.)                                       | 200           | 1.8    |
| L-Arginine hydrochloride                   | 84            | 0.4    | Ferric nitrate nonahydrate ( Fe(NO <sub>3</sub> ) <sub>3</sub> • 9H <sub>2</sub> O) | 0.1           | 0.0002 |
| L-Cystine dihydrochloride                  | 62.6          | 0.2    | Magnesium Sulfate (MgSO <sub>4</sub> ) (anhyd.)                                     | 97.67         | 0.8    |
| L-Histidine hydrochloride-H <sub>2</sub> O | 42            | 0.2    | Potassium Chloride (KCl)                                                            | 400           | 5.36   |
| L-Isoleucine                               | 105           | 0.8    | Sodium Bicarbonate (NaHCO <sub>3</sub> )                                            | 3700          | 44.04  |
| L-Leucine                                  | 105           | 0.8    | Sodium Chloride (NaCl)                                                              | 6400          | 109.5  |
| L-Lysine hydrochloride                     | 146           | 0.8    | Sodium Phosphate monobasic (NaH <sub>2</sub> PO <sub>4</sub> ) (anhyd.)             | 108.7         | 0.906  |
| L-Methionine                               | 30            | 0.2    | <b>Other components</b>                                                             |               |        |
| L-Phenylalanine                            | 66            | 0.4    | D-Glucose (Dextrose)                                                                | 1000          | 5.55   |
| L-Serine                                   | 42            | 0.4    | Sodium pyruvate                                                                     | –             | –      |
| L-Threonine                                | 95            | 0.8    | HEPES                                                                               | 5958          | 25     |
| L-Tryptophan                               | 16            | 0.08   | Phenol Red                                                                          | 14.95         | 0.0422 |
| L-Tyrosine disodium salt dihydrate         | 103.7         | 0.4    |                                                                                     |               |        |
| L-Valine                                   | 94            | 0.8    |                                                                                     |               |        |
| L-Glutamine                                | -             | -      |                                                                                     |               |        |
| L-Alanyl-L-Glutamine                       | -             | -      |                                                                                     |               |        |
| <b>Vitamins</b>                            |               |        |                                                                                     |               |        |
| Choline chloride                           | 4             | 0.0286 |                                                                                     |               |        |
| D-Calcium pantothenate                     | 4             | 0.0084 |                                                                                     |               |        |
| Folic Acid                                 | 4             | 0.0091 |                                                                                     |               |        |
| Niacinamide                                | 4             | 0.0328 |                                                                                     |               |        |
| Pyridoxine hydrochloride                   | 4             | 0.0195 |                                                                                     |               |        |
| Riboflavin                                 | 0.4           | 0.0011 |                                                                                     |               |        |
| Thiamine hydrochloride                     | 4             | 0.0119 |                                                                                     |               |        |
| i-Inositol                                 | 7.2           | 0.0389 |                                                                                     |               |        |