

## **α-MEM, GlutaPlus, no nucleosides**

**Cat. No.: G4555**

### **Product Information**

| Product Name                     | Cat. No.    | Spec.  |
|----------------------------------|-------------|--------|
| α-MEM, GlutaPlus, no nucleosides | G4555-500ML | 500 mL |

### **Product Description/Introduction**

α-MEM (α Minimum Essential Medium) is a modified medium from MEM. Compared with MEM, α-MEM has added sodium pyruvate, zinc sulfate, vitamin B12, biotin, ascorbic acid and other components, and is widely used for the culture of various mammalian suspension and adherent cells. α-MEM is divided into the types of nucleoside-containing and non-nucleoside-containing. The nucleoside-free and deoxynucleoside-free α-MEM is commonly used as a screening medium for DG44 and other DHFR-deficient cells.

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

This product is filtered and sterilized by 0.1 μm filter membrane, pH 7.0-7.4, contains L-Alanyl-L-Glutamine, sodium pyruvate, phenol red indicator, without HEPES and nucleosides. Please check the official website for the specific recipe.

### **Storage and Shipping Conditions**

Ship at room temperature; Store away from light 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. For best results, do not freeze and thaw repeatedly.
3. For your safety and health, please wear safety glasses, gloves and protective clothing.

**For Research Use Only!**

**Ver. No.: V1.1-20260528**

### G4555 α-MEM Formula

| Components                                    | Concentration |        | Components                                                                    | Concentration |           |
|-----------------------------------------------|---------------|--------|-------------------------------------------------------------------------------|---------------|-----------|
|                                               | mg/L          | mM     |                                                                               | mg/L          | mM        |
| <b>Amino acids</b>                            |               |        | <b>Inorganic salts</b>                                                        |               |           |
| Glycine                                       | 50            | 0.6667 | Calcium Chloride<br>(CaCl <sub>2</sub> )(anhyd.)                              | 200           | 1.801802  |
| L-Alanine                                     | 25            | 0.2809 | Magnesium Sulfate<br>(MgSO <sub>4</sub> ) (anhyd.)                            | 97.67         | 0.813917  |
| L-Arginine<br>hydrochloride                   | 105           | 0.4976 | Potassium Chloride (KCl)                                                      | 400           | 5.333     |
| L-Asparagine-H <sub>2</sub> O                 | 50            | 0.3333 | Sodium Bicarbonate<br>(NaHCO <sub>3</sub> )                                   | 2200          | 26.2      |
| L-Aspartic Acid                               | 30            | 0.2256 | Sodium Chloride (NaCl)                                                        | 6800          | 117.2     |
| L-Cystine 2HCl                                | 31            | 0.099  | Sodium Phosphate<br>monobasic (NaH <sub>2</sub> PO <sub>4</sub> )<br>(anhyd.) | 121.7         | 1.014     |
| L-Cysteine<br>hydrochloride-H <sub>2</sub> O  | 100           | 0.5682 | <b>Other components</b>                                                       |               |           |
| L-Glutamic Acid                               | 75            | 0.5102 | D-Glucose (Dextrose)                                                          | 1000          | 5.6       |
| L-Alanyl-L-Glutamine                          | 434.4         | 2      | Lipoic Acid                                                                   | 0.2           | 0.0009709 |
| L-Histidine<br>hydrochloride-H <sub>2</sub> O | 42            | 0.2    | Phenol Red                                                                    | 9.4           | 0.026567  |
| L-Isoleucine                                  | 52.4          | 0.4    | Sodium pyruvate                                                               | 110           | 1         |
| L-Leucine                                     | 52            | 0.3969 |                                                                               |               |           |
| L-Lysine<br>hydrochloride                     | 73            | 0.3989 |                                                                               |               |           |
| L-Methionine                                  | 15            | 0.1007 |                                                                               |               |           |
| L-Phenylalanine                               | 32            | 0.1939 |                                                                               |               |           |
| L-Proline                                     | 40            | 0.3478 |                                                                               |               |           |
| L-Serine                                      | 25            | 0.2381 |                                                                               |               |           |
| L-Threonine                                   | 48            | 0.4034 |                                                                               |               |           |
| L-Tryptophan                                  | 10            | 0.049  |                                                                               |               |           |
| L-Tyrosine Disodium<br>Salt                   | 52            | 0.2311 |                                                                               |               |           |
| L-Valine                                      | 46            | 0.3932 |                                                                               |               |           |
| <b>Vitamins</b>                               |               |        |                                                                               |               |           |

|                             |      |          |
|-----------------------------|------|----------|
| Ascorbic Acid               | 50   | 0.2841   |
| Biotin                      | 0.1  | 0.00041  |
| Choline chloride            | 1    | 0.007143 |
| D-Calcium<br>pantothenate   | 1    | 0.002096 |
| Folic Acid                  | 1    | 0.002268 |
| Niacinamide                 | 1    | 0.008197 |
| Pyridoxine<br>hydrochloride | 1    | 0.004902 |
| Riboflavin                  | 0.1  | 0.000266 |
| Thiamine<br>hydrochloride   | 1    | 0.002967 |
| Vitamin B12                 | 1.36 | 0.001004 |
| i-Inositol                  | 2    | 0.011111 |

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