

## alpha-MEM (including nucleoside), dry powder

**Cat:** C3300

**Size:** 1L/10L

**Storage:** 2-8°C, store away from light, valid for 3 years.

### Introduction:

alpha-MEM is an improved MEM medium. Compared with MEM medium, MEM- $\alpha$  medium is more nutritious. On the basis of MEM, NEAA, sodium pyruvate, zinc sulfate, VitB12, biotin, ascorbic acid and other components are added, which is widely used in the culture of suspended and adherent cells of various mammals. alpha-MEM medium free of nucleoside and deoxynucleoside is often 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, but does not contain proteins, lipids or any growth factors, so this product should be used with serum or no serum additives.

### Protocols(only for reference):

1. Pour about 90% ultra-pure water into a container, take a bag or weigh 1L of this product, pour all into the container, and wash out the residual powder in the bag with a small amount of ultra-pure water.
2. Stir for 30min to completely dissolve all ingredients. After the solution is clarified, add 2.2g sodium bicarbonate(analytical pure) and continue to stir for 5-10min until dissolved.
3. Add ultra-pure water to 1L.
4. If necessary, adjust the PH to 7.20-7.30 with 1mol/L sodium hydroxide solution or 1mol/L hydrochloric acid solution, which is lower than the target PH value(7.20-7.40) because filtration will make the PH of the medium slightly higher.
5. Remove bacteria by positive pressure filtration with a filter membrane with a pore size of 0.2 $\mu$ m(pay attention to aseptic operation).
6. After filtration, a small amount of liquid medium can be taken for bacterial test, and then used after passing. At this time, the shelf life of the liquid medium is 1 year, and the storage condition is 2~8°C.

**Note:** The use method takes the 1L specification as an example, and the use method of other specifications can be used by adding the corresponding amount of sodium bicarbonate and fixing the volume to the corresponding specification.

### General Ingredients Description:

Form	Powder
L-glutamine	2mM
D-glucose	1000mg/L
HEPES Buffer	None

Sodium pyruvate	1mM
Balanced salt solution	Earle's salt
nucleoside	included
Phenol red indicator	10.0mg/L

**Notes:**

1. For your safety and health, please wear a lab coat, disposable gloves and a mask;
2. In order to maintain the best use of this product, please be sure to store in accordance with the recommended storage conditions;
3. This product is intended for scientific research or further production use only and is not intended for clinical diagnosis or treatment.