

1 M HEPES Solution

Cat. No. : PB180325

Size: 100mL

General Information

Product Form	Liquid
Concentration	1M
pH	7.2-7.4
HEPES	238.3 g/L
Dissolvent	Ultrapure water
Storage	2-8°C, Shading light
Shipping	Room Temperature
Expiration date	2-8°C for 24 months

Background

HEPES is all known as N-2-hydroxyethylpiperazine-N-2-ethane sulfonic acid, is a commonly used biological buffer. pKa (25 °C) is 7.5 and an effective buffer range of pH is 6.8-8.2. The greatest advantage of HEPES is that to maintain the pH range of a solution for a longer period of time in an open environment. HEPES cannot pass through biofilms. It is a chemical and enzymatic stable substance with limited effect on biochemical reactions, and the absorption of visible and ultraviolet light is extremely low. Therefore, it is generally considered that HEPES is an excellent biological buffer, and there is no toxic effect to the cells. The working concentration is 10-50 mM and the final concentration for cell culture is 10 mM.

Notes

1. This product is for research use only.
2. This product is sterilized by 0.22 µm filtration and use directly without dilution.
3. It is necessary to pay attention to the aseptic operation and avoid the pollution.
4. Please store with shading light after using. It is reported that HEPES in the culture medium will produce hydrogen peroxide when exposed to light for more than 3 hours. And hydrogen peroxide has toxic effect on cells.