Product Information

HEPES solution, 1M

N-(2-Hydroxyethyl) piperazine- N'-(2-ethanesulfonic acid), HEPES Buffer

SRE0065

Product Description

N-(2-Hydroxyethyl) piperazine-N'-(2-ethanesulfonic acid) (HEPES) buffer preserves a normal physiological pH environment and is commonly used as a buffer in cell culture applications. HEPES buffer provides no nutritional benefit to cells but adds extra buffering capacity to the cell culture particularly during experiments performed outside the carbon dioxide incubator. This 1 M stock solution contains HEPES adjusted to pH 7.35 with sodium hydroxide.

Precautions and Disclaimer

For manufacturing, processing, or repacking.
Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Add the concentrated buffer to the cell culture medium to reach the desired concentration. (Typically, 10–25 mM).

Notes: If precipitation is present in the concentrated buffer, gently warm the bottle to 37 °C and mix until completely dissolved prior to dilution.

Storage/Stability

Stable for two years from the date of manufacture when stored at room temperature. Do not use past expiration date printed on product label.

References

1. Good, N.E. et al., Hydrogen ion buffers for biological research.
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Biochem., 173(1), 111–115 (1988).
3. Baicu, S.C., and Taylor, M.J., Acid-base buffering in organ preservation solutions as a function of temperature: new parameters for comparing buffer capacity and efficiency.
Cryobiology, 45(1), 33–48 (2002).
4. Zigler, J.S. et al., Analysis of the cytotoxic effects of light-exposed HEPES-containing culture medium.
In Vitro Cell. Dev. Biol., 21(5), 282–7 (1985).

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