

HEPES Buffer (1×, With Calcium And Magnesium)

Cat #: A-CSH421

Size: 500mL

Storage: 2-8°C (3 months)

Product Description

HEPES, also known as 4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid, has no toxic effects on cells. It is a zwitterionic buffering agent that effectively controls pH within a specific range and possesses good buffering capacity. The recommended final concentration is generally 10 to 50mmol/L, and a concentration of 20mmol/L HEPES in the culture medium provides good buffering capacity.

HEPES Buffer (1×, with calcium and magnesium) is a commonly used solution in cell-cell adhesion experiments. It mainly consists of HEPES, sodium chloride, potassium chloride, phosphate, glucose, and other components, including Ca^{2+} and Mg^{2+} . The pH is 7.4, and the solution has been sterilized by filtration. It is commonly used for washing tissues or cells (especially embryonic cells) during long-term aggregation cultures to protect cell adhesion molecules without affecting cell aggregation formation.

Usage

1. Mainly used for cell washing, similar to PBS. Use directly.
2. For cells, wash directly. For tissues, cut the tissue and place it in pre-chilled HEPES Buffer (1×, with calcium and magnesium). Cut the tissue into small pieces, collect the tissue with the minimum amount of buffer, transfer it to a culture dish coated with BSA, and use scissors to further mince the tissue for downstream cell culture experiments.

Notes

1. Pay attention to aseptic techniques and try to avoid contamination.
2. For your safety and health, please wear a lab coat and disposable gloves during operation.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.