

Tris-HCl Buffer (1mol/L, pH 7.4)

Cat #: A-CSH559

Size: 500mL

Storage: Room temperature (12 months)

Product Description

Tris (tris(hydroxymethyl)aminomethane) is a weak base with the molecular formula $C_4H_{11}NO_3$ and a relative molecular weight of 121.14. Its pKa at 25°C is 8.1. The effective buffering range of Tris buffer is between pH 7.0 and 9.2. Tris base has a pH of around 10.5 in aqueous solution. By adjusting the pH with hydrochloric acid, the desired pH value of the buffer can be obtained. Tris-HCl buffer is commonly used as a biological buffer, with frequently used pH values of 6.8, 7.4, 8.0, and 8.8. The pH value of Tris buffer varies significantly with temperature. Generally, for every 1°C increase in temperature, the pH value decreases by 0.03. Tris-HCl buffer is one of the most commonly used reagents in molecular biology. It serves as a basic component for various buffer formulations, allowing pH adjustment. For example, it is used in the preparation of Tris-EDTA solution, TBE electrophoresis buffer, and more.

Usage

Operate according to specific experimental requirements.

Notes

1. It can be irritating to the human body, so please take appropriate precautions.
2. For your safety and health, please wear laboratory attire and disposable gloves when handling.

Disclaimer

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