

Ver.P261001

0.5M EDTA

Cat. No : E1170

Product Introduction

0.5M EDTA pH 8.0 is an aqueous solution prepared by dissolving EDTA disodium salt dihydrate in distilled water and adjusting the pH to 8.0 with Sodium hydroxide. This buffer is suitable for biochemistry or molecular biology applications as a chelator of divalent metal ions.

Description

0.5M EDTA buffer is mainly used as a chelating agent during metal dependent enzymatic reactions as it has the ability to "sequester" metal ions such as Ca^{2+} and Fe^{3+} . After being bound by EDTA, metal ions remain in solution but exhibit diminished reactivity. Nucleic acids are normally stored in TE buffer that contains 1mM EDTA, which prevents degradation of nucleic acids by metal dependent nucleases. 0.5M EDTA buffer is also used as a chelating agent in tissue culture as it binds to calcium and prevents the joining of cadherins (Ca^{2+} dependent cell-cell adhesion) between cells and as a result clumping of cells is prevented.

Properties

pH	7.9 – 8.1
DNase/ RNase	None detected
Sterility	No Bacterial or Fungal growth observed after 14 days of incubation as per USP Specifications
Suitability test	This solution has been tested and is suitable for use in Molecular Biology Applications
Storage conditions	0.5M EDTA pH 8.0 solution has to be stored at RT. Under recommended condition, the reagent is stable for 12 months.