



TE Buffer 10X

Product No.: 2501

Synonym: Tris-EDTA buffer 10X

Introduction:

TE Buffer 10X is an extensively used buffer in Molecular Biology. Its principal application includes protection of DNA and RNA from degradation. The 10X buffer should be diluted to 1X before use.

Description:

TE buffer, also called "T10E1 " Buffer or "T ten E one buffer", is composed of Tris, a buffering agent and EDTA, a chelating agent. EDTA prevents the degradation of DNA and RNA by chelating divalent metal ions which are required for nuclease activity. The Tris buffering agent and EDTA metal chelating properties help protect DNA and RNA. Based on nuclease studies the pH should be adjusted to 7.5 for RNA and 8.0 for DNA as the respective DNA and RNA nucleases are supposed to be less active at these pH values, but pH 8.0 can be used for storage of both DNA and RNA.

Application:

TE buffer is mainly used in storing DNA. Genomic and plasmid DNA can be stored in TE Buffer at 4 °C for short-term use, or -20°C to -80°C for long-term storage. Repeated freeze-thaw cycles should be avoided. Moreover, Tris-EDTA buffer disrupts protein cross-links and therefore is useful in unmasking antigens and epitopes in formalin-fixed and paraffin-embedded tissue sections. This buffer is also used in immuno-histochemical detection of some proteins as it enhances the staining intensity of antibodies.

Composition:

Components	Weight / 1 liter	Molarity
Tris base	12.1g	100mM
0.5M EDTA (pH 8.0)	20ml	10mM

※ Must adjust pH with HCl

Storage: Store at Room Temperature.