

Technical Datasheet

Product Name: TE Buffer

Catalog number: BPBOI123

Concentration: 10X

Introduction:

Tris-EDTA (TE) buffer is commonly used in molecular biology laboratories for the preparation, storage, and protection of nucleic acid samples. It provides a stable alkaline environment that helps maintain the integrity of DNA and RNA during experimental procedures. TE buffer is especially useful for long-term storage of nucleic acids, as it minimizes degradation caused by nucleases and environmental conditions.

Product Description:

TE Buffer, composed of Tris-HCl and EDTA, is a reliable buffering solution designed for handling and preserving nucleic acids. Tris maintains a consistent pH, while EDTA chelates divalent metal ions such as Mg^{2+} and Ca^{2+} , thereby inhibiting nuclease activity. TE buffer is widely used for dissolving DNA pellets, storing plasmid DNA, genomic DNA, and RNA samples, and supporting various downstream molecular biology applications including PCR, cloning, sequencing, and electrophoresis.

Applications:

Bio Pioneer's TE Buffer is versatile and suitable for a range of applications

DNA & RNA Storage: Ideal for the long-term storage and preservation of plasmid DNA, genomic DNA, and other nucleic acid samples.

Protection Against Nuclease Activity: EDTA present in the buffer helps inhibit nuclease enzymes by chelating divalent metal ions, thereby protecting nucleic acids from degradation.

Immunohistochemical detection: Enhancing the staining intensity of antibodies in tissue sections.

Composition:

10X TE is made from highly pure molecular biology grade Tris base, EDTA and is conveniently premixed to save time.

Storage conditions:

10X TE can be stored at room temperature.

Warning and Precautions:

Not intended for medicinal use. Follow the Safety Data Sheet (SDS) thoroughly before starting the protocol. Always wear protective gloves, clothing, eye protection, and face protection. Adhere to good clinical laboratory practices when handling clinical samples and follow standard precautions as outlined in established guidelines. For detailed safety procedures, consult the product's Safety Data Sheet.

Safety Information:

The 10X TE is intended solely for laboratory applications and should not be used for human consumption. Always observe proper laboratory safety protocols, including wearing gloves and safety goggles when handling the buffer. It is not compatible with bleach-containing disinfectants. For details on hazards and safe handling procedures, please consult the Safety Data Sheet (SDS).

Technical Assistance:

At BioPioneer, we are committed to providing top-notch technical support and ensuring its accessibility. For any technical assistance, please email us at qc@biopioneer.in.