Technical Datasheet

Product Name: TAE Buffer

Catalog number: BPBOI010

Volume: 1 L

Introduction:

Tris-Acetate-EDTA (TAE) buffer is frequently utilized in DNA agarose gel electrophoresis, both within the gel and as the running buffer. Compared to Tris-Borate-EDTA (TBE) buffer, TAE allows for faster separation of linear and double-stranded DNA. It is particularly recommended for preparative gel electrophoresis where separated DNA fragments will be used in cloning or other processes involving enzymatic treatments.

Product Description:

TAE Buffer, which stands for Tris-Acetate-EDTA, is a commonly used electrophoresis buffer for separating nucleic acids, such as DNA and RNA, in agarose gel electrophoresis. It provides an optimal pH environment and ionic strength for the effective migration of nucleic acids through the gel matrix, ensuring high-resolution separation of DNA fragments.

Applications:

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

Agarose Gel Electrophoresis: Ideal for the separation of DNA and RNA in agarose gels.

Nucleic Acid Electrophoresis: Suitable for both analytical and preparative gel electrophoresis of nucleic acids.

DNA Recovery: Often used in procedures where DNA fragments need to be recovered from gels after electrophoresis.

Composition:

50X TAE is made from highly pure molecular biology grade Tris base, EDTA and acetic acid and is conveniently premixed to save time.

Storage conditions:

50X TAE can be stored at room temperature (15-25°C).

Warning and Precautions:

Not intended for medicinal use. Review 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 50X TAE is intended solely for laboratory applications and should not be used for pharmaceuticals, household purposes, or other non-laboratory uses. 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 info@biopioneer.in.