

TBE Buffer, Lyophilized powder

Cat #: C-BSM17202

Size: 1L/pouch*25

Storage: Store at room temperature for 3 years



Product Introduction

TBE is a white instant-dissolving powder used to prepare 1 L of 1× TBE buffer solution. It offers the convenience of easy and simple preparation. The main components of TBE are Tris, boric acid, and EDTA. The 1× TBE buffer solution contains Tris at a concentration of 89 mM, boric acid at a concentration of 89 mM, and EDTA at a concentration of 2 mM.

TBE is commonly used as a nucleic acid electrophoresis buffer in biological research, especially for DNA agarose gel electrophoresis. It has a strong buffering capacity and provides optimal separation of fragments smaller than 1 kb. It is also suitable for longer electrophoresis runs. However, when using TBE for agarose gel electrophoresis, it can induce high electro-osmotic flow and reduce the recovery efficiency of DNA fragments due to the formation of non-covalent complexes with hydroxyl groups in the agarose. Therefore, it is not recommended for DNA fragment recovery.

Components

- Tris : 89 mM
- Boric acid : 89 mM
- EDTA : 2 mM

Instructions for use:

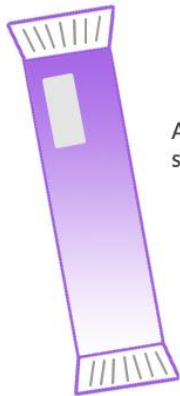
1. Measure approximately 600 ml of distilled water and add it to a beaker. Place a magnetic stir bar in the beaker.
2. Position the beaker on a magnetic stirrer and slowly add the entire contents of 1 packet of TBE powder. Stir the solution until it is completely dissolved.
3. Add distilled water to the TBE solution from step 2 to bring the total volume to 1 L, resulting in a 1× concentration.

* The commonly used working concentration of TBE is 0.5×, in which case the 1× working solution can be diluted before use.

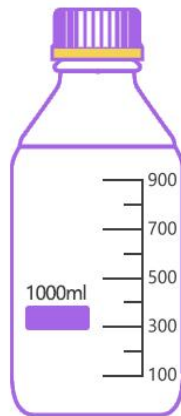
* Upon reconstitution, the pH of the 1x solution is 8.35 ± 0.15 at a temperature of 25°C

Illustration for reconstitution:

1 Pouch of lyophilized powder



1 L
1 x Buffer



Add water and stir to volume

