TBE Buffer (10X)

#GB12.0110 (1L 10X) | GB12.0510 (5L 10X)
(FOR RESEARCH ONLY)

Product: TBE Buffer (10X) is an aqueous solution of 0.89M Tris, 0.89M boric acid, and 20mM EDTA, prepared with ultrapure water, and 0.2 µm filtered (**T**ris-**B**orate-**E**DTA, 10x concentrated buffer). TBE can be used both for agarose and polyacrylamide gel electrophoresis. TBE is recommended for high resolution of small DNA fragments (<1.5kb), e.g. PCR products or products of restriction enzyme digestion, however, it is also suitable for RNA polyacrylamide electrophoresis.

Applications: DNA Agarose Electrophoresis, RNA polyacrylamide electrophoresis

Contents: #GB12.0110 contains 1L of 10X concentrated TBE Buffer
#GB12.0510 contains 5L of 10X concentrated TBE Buffer

Properties: High Resolution of small DNA fragments (<1.5kb)
High ionic strength. Buffer can be used multiple times.

Storage: Store at room temperature and re-test after 2 years.
In case of precipitation, dissolve by heating slowly to 40-50ºC.

Prior to use:

TBE (10X) is prepared with ultrapure water and 0.2µm filtered, and is provided as a 10X concentrated aqueous solution. The working concentration is 1X. Prepare 1L TBE Buffer (1X) by mixing 100ml of the 10X concentrated buffer with 900ml of ddH_2O. A 1X TBE buffer consists of 89mM Tris-borate, 2mM EDTA at pH 8.3±0.1.

Usage

Prepare 1X TBE the concentrate in pure water (see: prior to use). Prepare the agarose gel with 1X TBE. Fill the electrophoresis chambers with 1X TBE and put the gel casting tray into place. For optimal resolution, cover the gel with no more than 3-5mm of TBE. Apply samples and run the gel at constant voltage (5-10V/cm). Run the gel until the Bromophenol Blue tracking dye has run approximately 80% of the gel. Typically, running a minigel at 75-150V takes 1h-1.5h.