

Product Information

Tris-Borate EDTA Buffer, 10x Concentrate

SRE0062

Product Description

Tris-Borate EDTA (TBE) buffer is commonly used in the electrophoresis of nucleic acids in agarose and polyacrylamide gels. TBE buffer is recommended for resolution of RNA and DNA fragments smaller than 1500 bp.

This 10x TBE buffer stock solution contains 0.89 M Trizma® with 0.02 M EDTA adjusted to pH 8.3 with boric acid.

Precautions and Disclaimer

For manufacturing, processing, or repacking. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Preparation of 1x TBE working buffer:
Dilute the 10x concentrated TBE buffer 10-fold with ultrapure water ($\geq 18 \text{ M}\Omega\text{cm}$ resistivity at 25 °C).

Notes: If precipitation is present in the 10x concentrated buffer, warm the bottle to 37 °C and mix until completely dissolved prior to dilution.

It is recommended 1x working solutions be filtered through a 0.2 mm filter before use.

1x working solutions can be used until the expiration date on packaging with storage at room temperature.

If buffer becomes cloudy or discolored, discontinue use and discard.

Storage/Stability

Store at Room Temperature

This product is stable for two years from the date of manufacture when stored at room temperature. Do not use past expiration date printed on product label.

References

1. Brody, J.R., and Kern, S.E., History and principles of conductive media for standard DNA electrophoresis. *Anal. Biochem.*, 333(1), 1–13 (2004).
2. *Molecular Cloning: A Laboratory Manual*, 3rd ed., Sambrook, J., and Russell, D.W., CSHL Press, (Cold Spring Harbor, NY: 2001), pp. 5.8, 5.76, A1.16.
3. Ogden, R.C., and Adams, D.A., Electrophoresis in agarose and acrylamide gels. *Methods in Enzymology*, 152, 61-87 (1987).
4. Karger, B.L. et al., Capillary electrophoresis with polymer matrices: DNA and protein separation and analysis. *Methods in Enzymology*, 271, 293 - 319 (1996).
5. Park, Seung-min et al., A method for nanofluidic device prototyping using elastomeric collapse. *PNAS*, 106(37), 15549-15554 (2009).

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