

TAE(Tris-Acetate-EDTA) Buffer

Product	Con.	Cat#	Size
TAE (Tris-Acetate-EDTA) Buffer	50X	IBS-BT002	1 L
	50X	IBS-BT002-1	5 L
	25X	IBS-BT002a	1 L
	10X	IBS-BT002-2	1 L
	1X	IBS-BT002a-1	5 L
	1X	IBS-BT002-3	1 L

Components : 1X TAE Buffer Tris-Acetate 40 mM, EDTA pH 8.0 1 mM

Storage Conditions : Room Temperature

There are no time limitations for storage of the electrophoresis buffers at room temperature. If the buffer is stored at lower temperatures, a precipitate may form, which is easily dissolved by gentle heating.

Introduction : TAE buffer is a buffer solution containing a mixture of Tris base, acetic acid and EDTA. In molecular biology it is used in agarose electrophoresis typically for the separation of nucleic acids such as DNA and RNA. It is made up of Tris-acetate buffer, usually at pH 8.0, and EDTA, which sequesters divalent cations. TAE has a lower buffer capacity than TBE and can easily become exhausted, but linear, double stranded DNA runs faster in TAE.

Use : TAE buffer is used as both a running buffer and in agarose gel. Its use in denaturing gradient gel electrophoresis methods for broad-range mutation analysis has also been described. TAE has been used at various concentrations to study the mobility of DNA in solution with and without sodium chloride. However, high concentration of sodium chloride (and many other salts) in a DNA sample retards its mobility. This may lead to incorrect interpretations of the resulting DNA banding pattern.

Applications

- * Electrophoresis of nucleic acids in agarose and polyacrylamide gels.
- * Used both as a running buffer and as a gel preparation buffer.
- * Recommended for resolution of RNA and DNA fragments larger than 1500 b(p), for genomic DNA and for large super-coiled DNA.

Related Products

BT003 5X TBE
BT003-1 1X TBE
BT004 10X TBE