

50X TAE

<u>Product Name</u>	<u>Product Code</u>	<u>Kit Packing</u>
50X TAE	ML016-100ML	100 ml
	ML016-500 ML	500 ml
	ML016-2X500 ML	2X500 ml

Introduction

Tris-Acetate-EDTA (TAE) buffer is commonly used in DNA agarose gel electrophoresis. It is used both in the agarose gel itself and in the running buffer. In TAE buffer linear and double-stranded DNA separates faster compared to Tris-Borate-EDTA (TBE) buffer. TAE is recommended over TBE for preparative gel electrophoresis in which the electrophoresed DNA fragments being separated are to be used in cloning, and other work requiring enzymatic applications.

Description

50X TAE buffer is used for electrophoresis of nucleic acids after diluting it to 1X. Dilute 50X TAE Buffer to 1X using Molecular biology grade water (Recommended Product code: ML064). It has a lower buffer capacity than TBE; however, linear dsDNA tends to run faster in TAE than in TBE buffer. TAE Buffer is commonly used in low voltage DNA electrophoresis applications. It's relatively low buffering capacity will become exhausted in extended or high current runs, making buffer recirculation necessary in such runs.

Application

TAE (Tris-Acetate-EDTA) buffer is widely used in all DNA electrophoresis applications. TAE buffer provides better resolution of fragments greater than 4 kb. Potential advantages of TAE over TBE buffers include superior resolution of supercoiled DNA and slightly faster migration of ds linear DNA fragments.

Composition

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

Properties

Appearance/ Color/ Clarity	: Colorless clear solution and free of particles
pH	: 8.2-8.4
DNase & RNase	: None detected
Sterility	: No Bacterial or Fungal growth observed after 14 days of incubation as per USP Specifications
Agarose gel electrophoresis	: As per specific standards
Suitability test	: This solution has been tested and is suitable for use in Agarose Gel Electrophoresis

Please refer disclaimer Overleaf.

Storage conditions

50X TAE can be stored at room temperature (15-25°C). Under recommended condition, the reagent is stable for 48 months.

Warning and Precautions

Not for Medicinal Use. Read the SDS carefully before beginning the protocol. Wear protective gloves/protective clothing/eye protection/face protection. Follow good clinical laboratory practices while handling clinical samples. Standard precautions should be followed as per established guidelines. Safety guidelines may be referred in safety data sheets of the product.

Performance and Evaluation

Performance of the solution is expected when the solution is stored at recommended temperature and within the expiry period.

Safety Information

The 50X TAE is for laboratory use only, not for drug, household or other uses. Take appropriate laboratory safety measures and wear gloves and safety goggles when handling. Not compatible with disinfecting agents containing bleach. Please refer the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

Technical Assistance

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at mb@himedialabs.com.

Symbol

	Manufacturer		Do not use if package is damaged
	Batch code		Temperature limit
	Date of manufacture (YYYY-MM)		Consult instructions for use
	Use-by date (YYYY-MM)		Catalogue number

Identification No.: PIML016

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Disclaimer :

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