

★ Storage

Store at Room Temperature

Contents

- Product Manual
- 50X TAE Buffer

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Shipping Condition

Ship at ambient temperature

★ Introduction

Tris Acetate-EDTA buffer has been used for the preparation of agarose gel during DNA agarose gel electrophoresis. TAE running buffer is the most commonly used buffer for DNA agarose gel electrophoresis but is also used for non-denaturing RNA agarose gel electrophoresis. Double-stranded DNA tends to run faster in TAE than in other buffers but can also become exhausted during extended electrophoresis. Buffer circulation or buffer replacement during extended electrophoresis can remedy the lower buffering capacity. Dilution of the concentrated TAE buffer produces a 1× TAE buffer with 40 mM Tris-acetate and 1 mM EDTA, pH 8.3. The 1× TAE buffer is used both in the agarose gel and as a running buffer. Applied voltages of less than 5 V/cm (distance between the electrodes of the unit) are recommended for maximum resolution.

★ Formulation of 1X

Components	Concentration
Tris-acetate	40mM
EDTA	1mM

★ TAE vs. TBE Comparison Chart

	TAE	TBE	Note
Buffering Capacity	Low	High	TAE becomes exhausted during extended or repeated electrophoresis.
Migration of DNA	Fast	Slow	TAE has better conductivity.
Resolution	Better > 2Kb	Better < 2Kb	TBE supports agarose cross-linkage.
Enzyme Inhibitor	No	Yes	Borate from TBE inhibits many enzymes.

★ Related Products

Product Name	Cat No
Agarose Sepro	A0224
100bp PCR Ranger DNA Marker, 100bp-To-30kb	D1108
1kb PCR Ranger DNA Marker, 75bp-to-20kb	D1109
iVDye 50bp DNA Ladder	V1001
iVDye 100bp DNA Ladder	V1002
iVDye 1kb DNA Ladder	V1003
dNTP Mixtures, 10mM Each	D0610
amfiSure PCR Master Mix (2X)	P0311
amfiSure Primer PCR Master Mix (2X)	P1311
amfiSure PCR Master Mix (2X)	P2311
amfiSure Direct PCR Lysis Buffer	D0300
amfiEco Taq DNA Polymerase	P0701
SafePinky DNA Gel Staining Solution	S1001
amfiSure qGreen Q-PCR Master Mix (2X), w/o ROX	Q5600
amfiSure qGreen Q-PCR Master Mix (2X), w Fluorescein	Q5601
amfiSure qGreen Q-PCR Master Mix (2X), High ROX	Q5602
amfiSure qGreen Q-PCR Master Mix (2X), Low ROX	Q5603