

### ★ Storage

Store at Room Temperature

### ✎ Contents

- Product Manual
- 5X TBE 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

TBE running buffer is the most commonly used buffer for DNA and RNA polyacrylamide gel electrophoresis. TBE is used with non-denaturing or denaturing (7 M urea) gels. It is also routinely used for DNA automated sequencing gel. TBE can also be used for agarose gels but is not recommended for preparative gels for recovery of nucleic acids. Dilution of the TBE stock concentrates to a 1x TBE running buffer results in a buffer containing 89 mM Tris-borate and 2 mM EDTA, pH 8.3. 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-borate	89mM
EDTA	2mM

### ★ 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