
dsDNA Denaturation Buffer

Cat. No.: D1518770 | Pack size: 100 mL | Storage: Room temperature

Overview

Double-stranded DNA Denaturation Buffer, also known as Neutral Transfer Buffer, is primarily composed of 1.5 M NaCl, trace NaOH, and other components, and does not contain sucrose. This reagent is specifically designed for nucleic acid hybridization experiments, particularly suitable for the denaturation of double-stranded DNA in Southern blot experiments.

This product is for research use only. Not for use in diagnostic procedures or other purposes.

Procedure (For Reference Only)

The product can be used directly according to specific experimental requirements. The following are dedicated steps for DNA denaturation and transfer for different membrane types:

1. Transfer to Uncharged Membranes

1.1 DNA Denaturation: Place the gel in 10 volumes of Double-stranded DNA Denaturation Buffer. Incubate at room temperature for 45 minutes with continuous gentle agitation.

1.2 Neutralization Treatment: Briefly rinse the gel with deionized water. Subsequently, submerge the gel in 10 volumes of DNA Neutralization Buffer I. Incubate at room temperature for 30 minutes with gentle agitation. Replace with fresh DNA Neutralization Buffer I and continue incubation for another 15 minutes.

2. Transfer to Charged Nylon Membranes

2.1 Alkaline Denaturation: Place the gel in 5-10 volumes of DNA Alkaline Transfer Buffer. Incubate at room temperature for 15 minutes with continuous gentle agitation.

2.2 Secondary Denaturation: Replace with fresh DNA Alkaline Transfer Buffer and continue incubation for another 20 minutes with gentle agitation.

Notes

- If the target DNA fragment length is less than 20 kb, it is recommended to avoid performing depurination reactions to prevent fragment degradation.
- If the single-use volume is small, it is recommended to aliquot the reagent appropriately before use to minimize the impact of repeated freezing and thawing on reagent stability.

- Use the reagent as soon as possible after opening to avoid reagent inactivation or contamination, which could affect subsequent nucleic acid transfer and hybridization experiment results.

Specifications

Attribute	Value
Synonyms	Double-stranded DNA Denaturation Buffer
Specifications & Purity	BioReagent, Suitable for molecular biology, for DNA and RNA applications
Stability And Storage	Store at room temperature long term (12 months). Upon receipt, it is recommended to aliquot.
Storage Conditions	Room temperature
Shipped In	Normal
Grade	BioReagent, for DNA and RNA applications, Suitable for molecular biology

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

NORTH AMERICAN SALES, SUPPORT & GENERAL INQUIRIES

Aladdin Scientific Corporation

14078 Meridian Parkway, Riverside, CA 92518, USA

Phone: 1-833-552-7181

Sales: sales@aladdinsci.com

Customer Service: custserv@aladdinsci.com

EU SALES, LOGISTICS & LOCALIZED SUPPORT

Aladdin Biochem Deutschland GmbH

Westring 2, 33142 Büren, Germany

Phone: +02951 9383958

Support: support.eu@aladdinsci.com

Limitations & Disclaimer

- For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.
- Where any kit component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), the product Safety Data Sheet (SDS) takes precedence over this document for handling, storage, and disposal information.
- Performance depends on sample type, sample condition, handling, and operator technique. Users are responsible for validating the product for their specific application.
- Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If product formulation, label, SDS, storage condition, pack size, or quality specifications change, this document would be reviewed and reissued.