
Post-Decalcification Alkaline Treatment Solution

Cat. No.: P1525470 | Pack size: 500ml | Storage: Room temperature

Overview

When tissues contain bone tissue or calcified lesions during tissue sectioning, calcium-containing tissues cannot be directly embedded in paraffin for sectioning. This is due to the density difference between calcium and paraffin, which makes it difficult to obtain intact sections.

For calcium-containing tissues, decalcification is preferably carried out after fixation, or fixation and decalcification can be performed simultaneously. During decalcification, acidic substances break the cross-links between protein molecules in tissues and release hydrophilic groups that bind to water molecules, resulting in tissue swelling. Immediately after decalcification, the residual acid in the tissue must be neutralized to rapidly deacidify and neutralize the tissue, so as to guarantee sectioning quality and staining results.

This product is mainly composed of sodium sulfate or lithium sulfate, deionized water and other ingredients. Tissues treated with acidic decalcifying solution shall be soaked in this product overnight. This reagent is only intended for scientific research and shall not be used for clinical diagnosis or other purposes.

Operating Procedures (For Reference Only):

1. When sampling bone tissue for decalcification, the tissue block should not be overly thick, with a recommended thickness of approximately 5 mm.
2. After decalcification with formic acid, hydrochloric acid, nitric acid or other acids, rinse the tissue with distilled water 3 times for 20 minutes each time.
3. Transfer the tissue into Post-Decalcification Alkaline Treatment Solution with a volume 20 to 30 times that of the tissue sample, and perform overnight treatment for no less than 16 hours as recommended.
4. Rinse the sample with running tap water for 2 to 3 hours before proceeding with subsequent experiments.

Precautions

1. Appropriate heating can accelerate the treatment process, and the temperature should not exceed 37~40°C.
2. Rinsing with pure water is not recommended, as it tends to cause tissue swelling.

Appendix:

Ethanol Treatment Method:

Treat the sample with 70% ethanol, replace the ethanol every 1 hour, and repeat the operation 2 to 3 times.

Specifications

Item	Information
Synonyms	Post-Decalcification Alkaline Neutralization Buffer
Specifications & Purity	BioReagent
Stability And Storage	Store at room temperature long term (12 months).
Storage	Room temperature
Shipped In	Normal

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.

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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 kit for their specific application.
- Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If product formulation, label, SDS, storage conditions, pack size, or quality specifications change, this document would be reviewed and reissued.