VitroView™ EDTA Decalcification Solution (pH 7.2)

SKU#: VB-9004

Description

VitroView™ EDTA Decalcification Solution (pH 7.2) is a gentle, chelation-based reagent designed for the removal of calcium salts from calcified tissue specimens. It is particularly suitable for applications requiring excellent preservation of tissue morphology, cellular detail, antigenicity, and nucleic acids.

Application

- Routine histology (H&E staining)
- Immunohistochemistry (IHC)
- In situ hybridization
- Molecular assays (DNA/RNA-based applications)

Package Size

1000ml/ bottle

Storage:

Product is stable for about 12 months at room temperature.

Sample Preparation and Decalcification Procedure

1. Fix tissue thoroughly in 10% neutral buffered formalin (recommended minimum: 24–48 hours).
2. Rinse tissue briefly in running water to remove excess fixative.
3. Trim specimen to appropriate size to optimize decalcification time.
4. Add sufficient Formic Acid Fast Decalcification Solution to fully immerse the tissue.
5. Recommended ratio: 15–20 volumes of solution per volume of tissue
6. Cover container and label appropriately.
7. Incubate at room temperature (18–25 °C).
8. Gently agitate periodically to enhance decalcification. Or replace solution periodically (every 24–48 hours) for optimal performance.

Typical Decalcification Time:

Specimen Type	Approximate Time (days)
Small bone biopsy	5-7
Bone marrow core	4-7
Large bone sections	6–10
Large bone or Teeth	10-21

Time may vary depending on tissue density and size. Decalcification completion may be assessed by:

- Physical testing: Gently bending or probing tissue
- Chemical testing: Calcium oxalate or ammonium oxalate test
- Radiography: X-ray imaging (recommended for critical specimens)
- Avoid over-decalcification to prevent tissue damage.

Post-Decalcification Treatment

- Remove tissue from EDTA decalcifying solution.
- Wash thoroughly in running tap water or PBS buffer for 30–60 minutes to remove residual acid.
- Proceed with routine tissue processing, embedding, and sectioning.

Quality Considerations

- Overexposure may lead to loss of nuclear staining and antigenicity.
- Validate decalcification times for IHC or molecular assays.
- Maintain consistent specimen size for reproducible results.

Disclaimer:

This user manual serves as a general guideline. Users should adapt procedures based on specific experimental requirements and equipment specifications.