



VitroSure™ Buffer VKD for RNA Isolation

SKU: VB-5010

Description:

VitroSure™ Buffer VKD is a specialized lysis and digestion buffer designed for efficient RNA isolation from biological samples, particularly those requiring robust protein degradation while preserving RNA integrity. It is formulated to work synergistically with Proteinase K to ensure rapid and thorough disruption of cellular and nuclear structures, enabling high-quality RNA recovery.

Key Features and Benefits

- **Efficient Cell and Tissue Lysis:** Buffer VKD facilitates rapid resuspension of sample pellets and promotes complete lysis, ensuring maximal release of RNA from cells and tissues.
- **Enhanced Protein Digestion Compatibility:** When used in conjunction with Proteinase K, Buffer VKD supports effective proteolysis, breaking down proteins (including nucleases) that could otherwise degrade RNA.
- **RNA Integrity Protection:** The buffer composition helps inactivate RNases during the early stages of extraction, preserving RNA quality for downstream applications such as RT-PCR, qPCR, and sequencing.
- **Flexible Enzyme Usage:** Compatible with a range of Proteinase K concentrations (10–40 μ L per reaction), allowing optimization based on sample type and complexity.

Applications

- RNA extraction from cell pellets and tissue samples
- FFPE sample preparation (with appropriate upstream processing)
- Gene expression analysis workflows
- Diagnostic and research laboratory use

Content

Buffer VKD	10 ml
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Storage

Store at room temperature.

Typical Procedures

1. Proteinase K Preparation: Reconstitute 5 mg of Proteinase K powder (VB-5008) by adding 260 μ L of Proteinase K buffer.
2. Lysis: Resuspend the sample pellet in 150 μ L of Buffer VKD. Add 10–40 μ L of the reconstituted Proteinase K and vortex thoroughly.
3. Incubation: Heat at 56°C for 15 minutes to ensure complete lysis and protein digestion.

4. Cooling: Place the sample on ice for 3 minutes to stabilize the lysate.
5. Purification: Proceed with your standard RNA purification protocol (FFPE or fresh sample).

Note: This product is intended for research purposes only. This product is **not** intended to be used for therapeutic or diagnostic purposes in humans or animals.

Precautions: Handle with care. Avoid contact with eyes, skin, and clothing. Do not ingest. Wear gloves.