NZYtech genes & enzymes

MB134_SUP1_EN_V2401

NZY Total RNA Isolation Kit

Catalogue number	Presentation
MB13402	50 columns

Support Protocol for simultaneous isolation of Genomic DNA and total RNA from the same biological sample

I. Sample preparation

Tissue samples: Cut up to 30 mg tissue sample (see table 1) into small pieces and place it in a RNase-free microcentrifuge tube. Proceed with step II.

Cultured cells: Pellet up to 5×106 cultured cells (see table 1) at 6,000 *xg* for 5 min at 4 °C. Discard supernatant and add buffer NR directly to cell pellet. Proceed with step II.

Bacterial cells: Pellet up to 109 bacteria cells (see table 1) at 6,000 *xg* for 5 min at 4 °C. Discard the supernatant completely and add buffer NR directly to cell pellet. Proceed with step II.

II. Preparation of genomic DNA and total RNA

1. Add 350 µL of buffer NR and 3.5 µL β-mercaptoethanol to 100 µL of sample. Vortex vigorously.

Note: *The lysate may be passed through a needle fitted to a syringe to reduce the viscosity.*

2. Apply the lysate into an NZYSpin Homogenization column (purple ring) placed in a 2 mL collection tube. Centrifuge for 1 min at 11,000 xg. Save the flow-through.

3. Transfer the flow-through to a gDNA spin column (green ring) placed in a 2 mL collection tube. Centrifuge for 1 min at 11,000 xg. Save the flow-through for total RNA purification and proceed with step 3 of the standard RNA isolation protocol.

4. Place the gDNA spin column (green ring) in a new 2 mL collection tube and centrifuge for 1 min at > 11,000 xg. Discard flow-through and place the column in a new collection tube.

Proceed with step 7 of the standard genomic DNA purification protocol.

For life science research only. Not for use in diagnostic procedures.

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