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TriQuick Reagent

Catalog Numbers: EXR0223

Quantity :100ml

Storage: 2-8℃. Keep in Dark Place

Shelflife: 12 months

Product Information:

TriQuick Reagent is a complete, ready-to-use reagent for the isolation of high-quality total RNA from cell and tissue samples of animal, plant, yeast, or bacterial origin. It maintains the integrity of the RNA due to highly effective inhibition of RNase activity while disrupting cells. The RNA can be used in downstream applications such as Northern blotting, mRNA purification, Invitro-transcription, Rnase-protection assay, RT-PCR and cDNA clonning. TriQuick Reagent performs well with small quantities of tissue (50-100 mg) and cells (5×10^6) for 100 times.

Operating Instructions:

Materials needed but not supplied: Chloroform, Isopropyl alcohol, 75% ethanol, RNase-free water

1. **Samples preparation:**

   1) Adherent Cells: Remove growth media from culture dish. Add 1 mL TriQuick Reagent directly to the cells in the culture dish per 10 cm^2 of culture dish surface area. (Note: Add 1 mL TriQuick Reagent for a 35 mm dish, 3 mL for a 60 mm dish, and 8 mL for a 100 mm dish.) Lyse the cells directly in the culture dish by pipetting the cells up and down several times.

   2) Suspension Cells: Harvest cells by centrifugation and remove media. Add 1 mL of TriQuick Reagent to $5\times 10^6 - 1 \times 10^7$ cells from animal, plant or yeast origin, or 1×10^7cells of bacterial origin. Lyse cells in sample by pipetting up and down several times. Disruption of some yeast and bacterial cells may require the use of a homogenizer

   3) Tissues: Add 1 mL TriQuick Reagent per 50–100 mg of tissue sample. Homogenize sample by using a glass or power homogenizer.

   Note: Process or freeze tissue samples immediately upon collection.

   Incubate the lysing sample for 5 minutes at room temperature to permit complete dissociation of the nucleoprotein complex. For samples with high content of proteins, polysaccharides, or extracellular material, an additional centrifugation at 12,000 × g for 10 minutes at 4°C may be required to remove insoluble material from the samples. Transfer the cleared supernatant to a new tube.

2. **Phase separation**

   Add 0.2 mL of chloroform per 1 mL of TriQuick Reagent used for homogenization. Cap the tube securely. Shake tube vigorously for 30 seconds. Incubate for 2–3 minutes at room temperature. Centrifuge the sample at 12,000×g for 10 minutes at 4°C. pipetting the aqueous phase into a new tube. Avoid drawing any of the interphase or organic layer into the pipette when removing the aqueous

phase.

3. **RNA precipitation**

   Add 0.5 mL of 100% isopropanol to the aqueous phase, per 1 mL of TriQuick Reagent used for homogenization. Incubate at room temperature for 10 minutes. Centrifuge at 12,000 ×g for 10 minutes at 4°C. Remove the supernatant from the tube, leaving only the RNA pellet. Wash the pellet with 1 mL of 75% ethanol. Vortex the sample briefly, then centrifuge the tube at 12000×g for 2minutes at 4°C. Discard the wash buffer. Vacuum or air dry the RNA pellet for 5–10 minutes.

4. **RNA resuspension**

   Resuspend the RNA pellet in RNase-free water (20–50 μL), Proceed to downstream application, or store at –80°C.

Note

1. The Environment and all equipments used in experiment like tubes, pipets should be Rnase-free to aviod RNA degradation.
2. Always work with TriQuick Reagent in a fume hood, and always wear a lab coat, gloves and safety glasses. Avoid direct contact with TriQuick Reagent

Reference Paper

[1] Yanfeng Zhu,Weihui Chen,Weiqun Guan,et al. Study of As2O3 regulating proliferation and apoptosis of Tca8113 cells by inhibiting the expression of Id-1. Artificial Cells,Nanomedicine, and Biotechnology. May 2019. (IF 4.462)

[2] Peiying Jin,Zihui Zheng,Hongjie Lu,et al. Roles of β -catenin, TCF-4, and survivin in nasopharyngeal carcinoma: correlation with clinicopathological features and prognostic significance. Cancer Cell International. February 2019. (IF 3.439)

[3] Mingzhu Guo,Meng Meng,Chengcheng Feng,et al. A novel polysaccharide from Craterellus cornucopioides enhances immunomodulatory activity on immunosuppressive mice models by regulation of TLR4-NF-κB pathway. Food & Function. July 2019. (IF 3.241)

[4] Lei Ding,Shuhong Zhang,Shijun Chen,et al. Effect and mechanism of lentivirus-mediated silencing of TPX2 gene on proliferation and apoptosis of human hepatoma cells. Journal of Cellular Biochemistry. December 2018. (IF 3.448)

[5] Xin Deng,Laijun Song,Wen Zhao,et al. Corrigendum: HAX-1 Protects Glioblastoma Cells From Apoptosis Through the Akt1 Pathway. Cell. Neurosci. January 2019.