Differentiating Research

Product Details

QZol™

Equivalent to TRIZOL ®

Product Overview

DX/DT'S QZol™ is a first-class reagent which can be used to isolate RNA, DNA as well as proteins from various biological sources like samples of animal, plant, yeast and bacterial origin within an hour. Qzol reagent is based on guanidium thiocyanate – phenol which helps to disrupt the cell wall and separates the nucleic acids by making it into different phases. This is the single step isolation which gives you the high-quality RNA, DNA and also proteins. Isolated RNA can be precipitated with the help of Isopropanol and it can be stored using DX/DT's RiboStore™, an RNA storing buffer.

Catalog Details

RB01-1	100 mL	Visit us for more
RB01-5	500 mL	www.dxbidt.com

Storage

Room Temperature

Protocol

According to your starting material, lyse and homogenize samples in QZol™ Reagent.

For Tissues

Add 1 mL of QZol™ Reagent to 50–100 mg of tissue samples and homogenize using a homogenizer.

For cells grown in monolayer

a. Remove growth media.

b. Add 1 mL of QZol™ Reagent per 1 × 10^5 to 10^7 Cells directly in the culture dish to lyse the cells.

c. Pipet the lysate up and down several times to homogenise.

For cells grown in suspension

a. Collect the cells by centrifugation and discard the supernatant.

b. Add 1 mL of QZol™ Reagent for every (5 to 10 X 10^6 cells of plant, yeast or animal origin or 1x 10^7 bacterial cells). Pipet the lysate up and down several times to homogenise.

STEP 1: Homogenization/resuspension

1. To homogenize, pipette the lysate many times up and down.
2. If the samples contain much fat, centrifuge the lysate at 12,000 rpm for 5 minutes at 4 to 10 °C, then transfer the clear supernatant to a fresh tube.
3. Incubate for 2-5 minutes at room temperature.
4. Shake the tube vigorously, then add 0.2 mL of chloroform for every 1 mL of QZol™ Reagent used for lysis.
5. Incubate for 2 -3 minutes at room temperature.
6. Centrifuge the sample at 12,000 rpm for 10- 15 minutes at 4°C. (The mixture divides into an upper colourless aqueous phase, interphase, and a lower phenol-chloroform phase).
7. Angle the tube at 45° and pipet the aqueous phase containing the RNA into a new clean & RNAse-free tube.

TIPS Try to complete the first step within 30-40minures.

STEP 2: Precipitation

- For every 1 mL of the QZol™ Reagent used for lysis, add 0.5 mL of isopropanol to the aqueous phase.
- Incubate at 4°C for 10 minutes.
- Centrifuge at 12,000 rpm for 10 minutes at 4°C.
- At the bottom of the tube, the total RNA precipitate condenses into a white pellet that resembles a gel.
- Discard the supernatant.

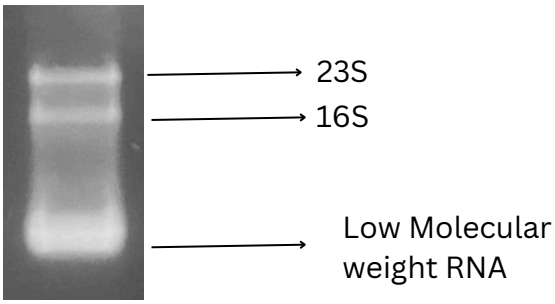
STEP 3: Washing

- Add 1 mL of 75% ethanol for every 1 mL of the QZol™ Reagent and re-suspend the pellet.
- centrifuging it at 7500 rpm for 5 minutes at 4°C.
- Discard the supernatant.
- Air dry the RNA pellet for 2- 3 minutes. Sometimes, you may not see any pellet but still go ahead for next step.

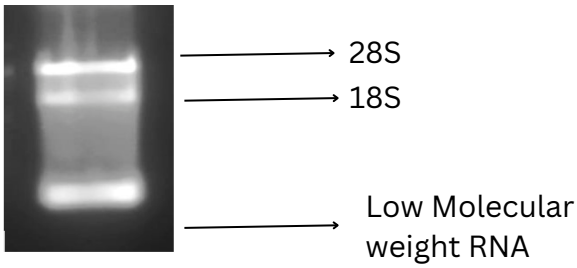
STEP 4: Re-Solubilization

- Re-suspend the pellet in 20–50µL of RNase-free water or DX/DT RiboStore™ buffer solution.
- Incubate for 15 minutes at 60 °C.
- After this, the RNA can be used for subsequent downstream applications, or you can freeze the RNA at -80℃. (Note: DX/DT RiboStore™ buffer is highly stable than nuclease-free water and protects RNA from degradation, which is ideal for long-term storage.)

Performance of QZol™



RNA Source: Bacterial Cell lines



RNA Source: Hela Cell lines

Related products

Catalog# R6203 .>>PhiScript cDNA Synthesis Mastermix 5X -- For efficient cDNA Synthesis within 30 minutes

Catalog# R2220 .>>Polaris SYBR Mastermix (2X) -- For gene expression analysis on qPCR assays.

Contact

info@dxbidt.com | +91-7349708807 | www.dxbidt.com