

TransZol Plant

Cat.No.: ET121

Storage: at room temperature for one year

Description

TransZol Plant is a ready-to-use reagent for the isolation of total RNA from polysaccharide-rich and/or polyphenol plant tissues, such as champignon, banana fruit, mango fruit, potato, carrot, sansevieria. It uses a modified CTAB method to lyse samples and phenol/chloroform to remove proteins and other impurities. It is also suitable for the isolation of total RNA from animal tissues like fat, connective tissues etc.

Highlights

- Superior lysis capability and higher RNA yield.
- The whole procedure can be completed in one hour.
- Pink solution for easy visualizing different phases.
- Unique dissolving solution for long-term RNA storage.

Kit Contents

Component	ET121-01
TP I buffer	100 ml
TP II buffer	100 ml
RNA Dissolving Solution	15 ml

Procedures

Reagents provided by customers: chloroform, isopropanol, 75 % ethanol (prepared with RNase-free water).

All centrifugation steps are performed at 2-8°C.

1. Completely grind plant tissues in liquid nitrogen. Then add TP I solution to the homogenized tissues (add 1 ml of TPI for every 80-100 mg plant tissues). Mix thoroughly by pipetting several times and transfer all the lysate to a RNase-free microcentrifuge tube.
2. Centrifuge the lysate at 12,000×g for 5 minutes.
3. Transfer the supernatant (maybe a little cloudy) into two microcentrifuge tubes (about 400-500 µl each).
4. Add equal volume of TP II solution (pink) to each tube. Mix thoroughly by pipeting several times. Add chloroform (equal to 1/4 volume of the supernatant from step 3, about 100 -125 µl) to each tube, mix thoroughly by pipetting several times. Incubate at room temperature for 5 minutes.
5. Centrifuge the lysates at 12,000×g for 5 minutes. The lysates are separated into three layers: clear layer (colorless), interphase (colorless transparent oil, about 50 µl solution) and organic layer (pink). RNA is located in the clear layer.
6. Carefully transfer the colorless supernatant from two tubes to a new 1.5 ml RNase-free tube. (The clear layer and intermediate layer are difficult to distinguish. Recommend to leave about 50-100 µl colorless solution in the tube to avoid contamination).
7. Add equal volume of isopropanol to the transferred supernatant. Mix by inverting 4-6 times. Incubate at room temperature for 10 minutes.
8. Centrifuge at 12,000×g for 10 minutes. Discard the supernatant. RNA precipitate (white) can be seen on the bottom of the tube.
9. RNA pellet is dissolved in 30-40 µl of dissolving solution. For long-term storage, store the purified RNA at -70°C.

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