

INTENDED USE

AZUL Soil RNA Extraction Kit is an easy and efficient system for the isolation of total RNA from environmental samples like soil.

SUMMARY AND EXPLANATION

This kit uses a silica-based spin column technology for isolating RNA from biological samples, thereby eliminating toxic phenol-chloroform extractions. The eluted RNA is suitable for all sensitive downstream applications such as qPCR and Next-Generation sequencing.

PRODUCT FEATURES

- Rapid purification of high-quality, ready-to-use RNA.
- No organic extraction or alcohol precipitation.
- Consistent and high yields.
- Complete removal of contaminants and inhibitors for reliable results.
- Kit formats for low- to high-throughput – options for automation of all kits.

PRECAUTIONS

- Avoid all skin contact with reagents in this kit. In case of contact, wash thoroughly with water.
- AZUL Soil RNA Extraction kit is intended for use as supplied. Do not dilute or add other components to the AZUL Soil RNA Extraction kit.
- Use RNase free plasticware/reagents and pipette tips for better yields.

DIRECTIONS FOR USE

1. Collect soil sample (ensure soil sample is collected from the rhizospheric region of plant roots). Weigh 500 mg to 1 g of soil and transfer it to a clean microfuge tube.
2. Add 4-5 glass beads (3.5 mm - 4 mm) to the soil sample. Now add 700 µL- 1mL of Extraction Buffer, 25 µL of Lysis Buffer, and vortex thoroughly for 5-7 mins.
3. Add 20 µL of Proteinase K, invert and mix the tubes, and place the tube in a 56 °C water bath for 15-20 mins.
4. Centrifuge the contents at 15,000 rpm for 15 mins at RT. Transfer the clear supernatant to a new microfuge tube.
5. To this suspension, add 600 µL Binding Buffer (BB) and mix by inverting the tube briefly. Place the tube in -20 °C for 10 mins.
6. Transfer the lysate to a clean spin column. Centrifuge the spin column at 15,000 rpm for 2 min at RT.
7. Discard the flow-through and place the purification column back into the collection tube. Repeat this step until the entire lysate has been transferred into the column and centrifuged.
8. Wash the spin column with 600 µL Wash Buffer 1 (WB1) at 15,000 rpm for 1 min and discard the flow through.
9. Add 500 µL of Wash Buffer 2 (WB2) to the column and centrifuge at 15,000 rpm for 1 min to completely remove salts and impurities.
10. Keep the purification column in a clean, sterile 1.5 mL microfuge tube and add 30-50 µL of Elution Buffer or DNase/RNase-free water to the center of the column.
11. Centrifuge the column for 15,000 rpm for 2 min.
12. Discard the purification column and store the eluted RNA at -20°C or -80°C until use.

KIT COMPONENTS

Components	For 50 preps	For 25 preps
Extraction Buffer	50 mL	25 mL
Lysis Buffer (LB)	2 mL	1 mL
Proteinase K	1 mL	0.5 mL
Glass beads	250	125
Binding Buffer (BB)	30 mL	15 mL
Wash Buffer 1 (WB1)	30 mL	15 mL
Wash Buffer 2 (WB2)	25 mL	13 mL
Elution Buffer(EB)	4 mL	2 mL
Spin Column	50 (Pouch pack)	25 (Pouch pack)

CAUTION

- Check the Extraction buffer and Binding Buffer for any salt precipitation before every use.
- Re-dissolve any precipitate by warming the solution to 37°C, then cool it back to room temperature before use.
- During operation, always wear a lab coat, disposable gloves, protective goggles and mask.

KIT STORAGE AND STABILITY

- Store the kit at room temperature.
- Viable for 1 year if stored at appropriate conditions.

ORDERING INFORMATION

Please call us at +91 8088747968 or mail at hello@azooka.life for any queries or assistance. Additional information can be found online at www.azooka.life