# AZUL PLANT DNA EXTRACTION KIT



## **INTENDED USE**

AZUL Plant DNA Extraction Kit is an easy and efficient system for the isolation of total DNA from plant tissues like leaves, root, and stem etc.

#### **SUMMARY AND EXPLANATION**

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

## **PRODUCT FEATURES**

- Rapid purification of high-quality, ready-to-use DNA.
- 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 Plant DNA Extraction kit is intended for use as supplied. Do not dilute or add other components to the AZUL Plant DNA Extraction kit.

#### **DIRECTIONS FOR USE**

- 1. Collect and weigh 500 mg of plant tissue (leaves, stems, or roots) and place it in a pre-chilled mortar and pestle.
- 2. Add 625  $\mu$ L of Extraction Buffer and grind thoroughly.
- 3. Transfer this tissue lysate into a clean 1.5 mL microfuge tube and add 25  $\mu L$  Lysis Buffer. Mix briefly by vortexing for 30 seconds
- 4. Place the tube in a  $65^{\circ}\text{C}$  water bath for 15 minutes, with intermittent vortexing every 5 min.
- 5. Centrifuge the tube at 15,000 rpm for 15 minutes at RT. Transfer the clear supernatant to a new microfuge tube.
- 6. Add 600  $\mu$ L Binding Buffer (BB) to this suspension and mix briefly by inverting the tube a few times. Place the tube at -20°C for 15 minutes.
- 7. Transfer the suspension to a spin column and centrifuge the tube at 15,000 rpm for 2 min at RT.
- 8. Discard the flow-through and place the purification column back into the collection tube. Repeat this step until complete lysate has been transferred into the column and centrifuged.
- 9. Wash the spin column with 600µL Wash Buffer 1 (WBI) at 15,000 rpm for 1 min and discard the flow through.
- 10. Add 500 $\mu$ L of Wash Buffer 2 (WB2) to the column and centrifuge at 15,000 rpm for 1 min to completely remove salts and impurities.
- 11. Keep the purification column in a clean, sterile 1.5 mL microfuge tube and add  $30\mu$ L-  $50\mu$ L of Elution Buffer or DNase/RNase-free water to the center of the column.
- 12. Centrifuge the column for 15,000 rpm for 2 min.
- 13. Discard the purification column and store the eluted DNA at -20°C or -80°C until use.

#### KIT COMPONENTS

Components	For 50 preps	For 25 preps
Extraction Buffer	35mL	18mL
Lysis Buffer(LB)	2mL	1mL
Binding buffer(BB)	30mL	15mL
Wash Buffer 1(WB1)	30mL	15mL
Wash Buffer 2(WB2)	25mL	13mL
Elution Buffer(EB)	4mL	2mL
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

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