DNeasy® Plant Pro Kit

Solution CD2 should be stored at 2–8°C upon arrival. All other reagents and kit components should be stored at room temperature (15–25°C), until the expiry date printed on the box label.

Further information

- Safety Data Sheets: [www.qiagen.com/safety](http://www.qiagen.com/safety)
- Technical assistance: [support.qiagen.com](http://support.qiagen.com)

Notes before starting

- If Buffer APP contains precipitates, heat at 60°C until precipitate dissolves.
- Perform all centrifugation steps at room temperature (15–25°C).
- Refer to kit handbook for optimal homogenization method in step 2.

1. Add 5–100 mg of fresh or frozen plant tissue and 500 µl of Solution CD1 to a 2 ml tissue disruption tube. Vortex briefly to mix.
   **Note**: If your sample is high in phenolic compounds, add 450 µl Solution CD1 and 50 µl Solution PS.

2. Homogenize using one of these methods:
   
   2a. **Vortex**: Secure tissue disruption tubes to a Vortex Adapter (cat. no. 13000-V1-24) and vortex at maximum speed for 10 min.
   
   2b. **TissueLyser II**: Most plant samples can be lysed with the Tissuelyser II, using the Tissuelyser Adapter Set 2 x 24: Place samples in the Tissuelyser II and run at 24 Hz for 2 min. Reorient the adapter so the side closest to the machine body becomes furthest from it, and then run the Tissuelyser again at 24 Hz for another 2 min.
   
   2c. **PowerLyzer® 24 Homogenizer**: Tissue disruption tubes must be properly balanced in the tube holder of the PowerLyzer 24 Homogenizer. Homogenize the tissue for 1 cycle at the appropriate speed depending on sample type for 2 min.

3. Centrifuge the tissue disruption tubes at 12,000 x g for 2 min.
4. Transfer the supernatant to a clean 1.5 ml microcentrifuge tube (provided).
   **Note:** Expect 350–450 µl. The supernatant may still contain some plant particles.

5. Add 200 µl Solution CD2 and vortex for 5 s.
   **Note:** For problematic samples, add 250 µl Solution CD2.

6. Centrifuge at 12,000 x g for 1 min at room temperature. Avoiding the pellet, transfer the supernatant to a clean 1.5 ml microcentrifuge tube (provided).
   **Note:** Expect 400–500 µl.

7. Add 500 µl of Buffer APP and vortex for 5 s.

8. Load 600 µl lysate onto an MB Spin Column. Centrifuge at 12,000 x g for 1 min.

9. Discard the flow-through and repeat step 8 to ensure that all of the lysate has passed through the MB spin column.

10. Place the MB spin column into a clean 2 ml collection tube (provided).

11. Add 650 µl Buffer AW1 to the MB spin column. Centrifuge at 12,000 x g for 1 min. Discard the flow-through and place the MB spin column back into the same 2 ml collection tube.

12. Add 650 µl of Buffer AW2 to the MB spin column. Centrifuge at 12,000 x g for 1 min. Discard the flow-through and place the MB spin column into the same 2 ml collection tube.

13. Centrifuge at up to 16,000 x g for 2 min. Place the MB spin column into a new 1.5 ml elution tube (provided).

14. Add 50–100 µl of Buffer EB to the center of the white filter membrane.

15. Centrifuge at 12,000 x g for 1 min. Discard the MB spin column. The DNA is now ready for downstream applications.

**Revision History**

<table>
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<tr>
<th>Date</th>
<th>Changes</th>
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<tr>
<td>August 2019</td>
<td>Updated storage conditions. Rephrased homogenization instructions for TissueLyser 2, for clarity.</td>
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For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual.