

Total RNA isolation from various Plant samples

Isolating high quality total RNA from Plant Leaf Tissues using Maxwell 16 LEV Plant RNA Kit

Kit: Maxwell 16 LEV Plant RNA Kit (Cat. #AS1430)

Analyses: RT-qPCR

Sample Type(s): Young Plant Leaves

Input: Leaf tissue from 40 to 100mg

Materials Required:

- Beads-Beating Device
- Centrifuge

Protocol:

1. Add 600ul of chilled 1-Thioglycerol/Homogenization Solution to each sample tube.
2. Using the bead-beating device, homogenize samples for desired time.
3. Centrifuge samples at max speed for 5 minutes.
4. Transfer the 400μL of lysate to new tube.
5. Add 200μL of Lysis Buffer. Mix vigorously by vortex for 15 seconds.
6. Transfer the entire volume to well #1 of the Maxwell 16 Cartridge.
7. Add 5μL of reconstituted DNase I into well #4.
8. Place the Elution Tube into the Cartridge Rack and add 50μL of Nuclease-Free Water for each sample.
9. Place the LEV Plunger in the indicated position of the cartridge.
10. Select method: RUN, RNA, Plant, Start, Run

Results:

Plant	Type	Weight	Conc. (ng/μL)	A260/280	A260/230	Application
Tomato	Leaf	100mg	133.8	2.16	2.15	RT-qPCR
Chinese cabbage [白菜]	Leaf	100mg	104.2	2.16	2.22	RT-qPCR
Komatuna [小松菜]	Leaf	100mg	995.2	2.14	2.38	RT-qPCR
Strawberry	Leaf	40mg	178.4	2.10	2.16	RT-qPCR
Arabidopsis	Leaf	100mg	870.9	2.14	2.14	RT-qPCR