PowerPlant® DNA Isolation Kit

Overview

For isolating quality DNA from plants including those high in phenolics and polysaccharides.

Features

1. New method improves PCR inhibitor removal
2. Included steel beads enhance sample homogenization
3. Utilizes easy hands-off homogenization
4. Homogenization method eliminates cross-contamination and the need to clean grinding tools between samples
5. Includes tough customized tubes to bead beat and homogenize without tube breakage
6. Process more samples with less clean up
7. Compatible with vortexes, MO BIO's Precellys® 24 or any bench top homogenizer

Description

The PowerPlant® DNA Isolation Kit isolates genomic DNA free from PCR impurities from even the toughest plant samples using a powerful homogenization method. Due to the unique hands-off bead beating method, up to 24 samples can be processed simultaneously using a vortex adapter or a bench top homogenizer, such as our Precellys® 24 Homogenizer. This method effectively eliminates both bottlenecks and cross-contamination risk found with hand grinding with a mortar and pestle.

The PowerPlant® DNA Isolation Kit saves significant time when compared to traditional liquid nitrogen methods and yields are comparable. In addition, its novel PCR inhibitor removal system ensures the DNA is free of polyphenols and polysaccharides allowing for all downstream applications including successful PCR analysis.

Other Products

- **UltraClean-htp™ 96 Well Plant DNA Isolation Kit**
- **UltraClean™ Plant DNA Isolation Kit**
- **PowerPlant™ DNA Isolation Kit Components**
- **UltraClean™ Plant DNA Kit Components**
- **PowerMax™ Soil DNA Isolation Kit**

To order contact:
306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222
Mobile: +91-9810521400 Fax: +91-11-42208444
Email: customerservice@atzlabs.com
Web: www.atzlabs.com

Powerful Protocol

The PowerPlant® DNA Isolation Kit protocol begins by adding plant material to the provided tubes containing specialized beads along with optimized reagents for rapid homogenization. Cell lysis and DNA release occur by both mechanical and chemical methods to maximize DNA isolation efficiency. A silica membrane in a spin column format is used to capture, wash and elute the pure DNA.

The PowerPlant® DNA Isolation Kit has been successfully utilized on a wide variety of plant types including leaf, roots, and seed samples. Occasionally, plants such as pine needles, cotton, sunflower, and strawberry present additional challenges and require an additional clean up procedure. The PowerPlant® DNA Isolation Kit provides special clean-up reagents as an optional step to assure success among even the most challenging plant samples.

Specifications

Format	Silica Spin Filter Tubes
Method	Bead Beating
Starting Amount	50 mg
Binding Capacity	Up to 40 µg per filter
Throughput	1 - 24 samples
Time	60 minutes
Equipment Required	Vortex and Vortex Adapter

Storage Conditions

Store at room temperature for up to 2 years.

Kit Components

Component	13200-50	13200-100
Bead Tubes	50	100
Bead Solution	30 ml	70 ml
Solution PB1	5.5 ml	11 ml
Solution PB2	20 ml	43 ml
Solution PB3	3 x 30 ml	6 x 30 ml
Solution PB4	28 ml	55 ml
Solution PB5	30 ml	2 x 30 ml
Solution PB6	11 ml	22 ml
Solution PB7	4 ml	8 ml
Spin filters in Tubes	50	100
2 ml Collection Tubes	100	200
2.2 ml Collection Tubes	50	100

Publications

- Samuels, G.J., Lu, B-S., Chaverri, P., Candoussau, F., Fournier, J., and Rossman, A.Y. *Cyanonextria* ad New Genus for *Nectria cyanostoma* and its *Fusarium* Anamorph. Mycological Progress. 8(1): 49-58 (2009).
- Desalvo, M.K., Voolstra, C.R., Sunagawa, S., Schwarz, J.A., Stillman, J.H., Coffroth, M.A., Szmant, A.M., and Medina, M. Differential gene expression during thermal stress and bleaching in the Caribbean coral *Montastraea faveolata*. Molecular Ecology. 17: 3952-3971 (2008).

To order contact:
306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222
Mobile: +91-9810521400 Fax: +91-11-42208444
Email: customerservice@atzlabs.com
Web: www.atzlabs.com