

## Plant/Fungi DNA Isolation Kit

Norgen's Plant/Fungi DNA Isolation Kit provides a rapid method for the isolation and purification of total DNA from a wide range of plant and filamentous fungal species. Total DNA, including genomic DNA, mitochondrial DNA and chloroplast DNA can be purified from fresh or frozen plant tissues, plant cells or filamentous fungi samples using this kit. The procedure is rapid and convenient, as it does not rely on the use of liquid nitrogen in order to homogenize the samples. The DNA is preferentially purified from other cellular components, such as proteins, without the use of phenol or chloroform. The purified DNA is of the highest integrity, and can be used in a number of downstream applications including real-time PCR, SNP, Southern blotting and sequencing.

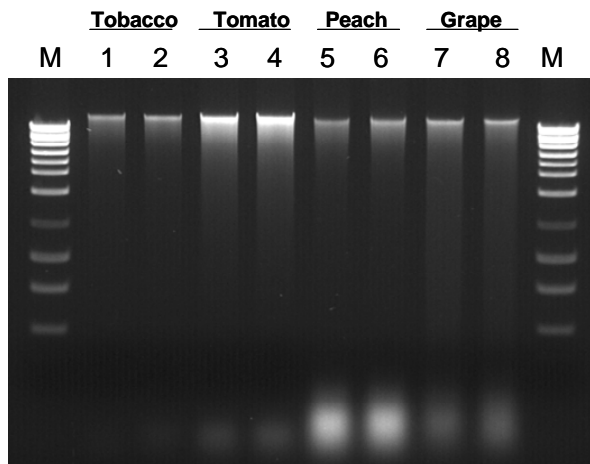


Kit Specifications			
Column Binding Capacity	50 µg	Time to Complete 10 Purifications	45 minutes
Maximum Column Loading Volume	600 µL	Average Yield*	
Maximum Amount of Starting Material:		Tobacco Leaves (50 mg)	18 µg
Plant Tissues	50 mg	Grape Leaves (50 mg)	10 µg
Plant Cells	1 x 10 <sup>6</sup> cells	<i>Penicillium sp.</i> (50 mg wet weight)	1 - 2 µg
Fungi (wet weight)	50 mg	<i>Fusarium sp.</i> (50 mg wet weight)	1 - 2 µg

### Plant/Fungi DNA Isolation Kit Benefits

No liquid nitrogen required for homogenization	Liquid nitrogen is not required for homogenization of samples, making DNA purification rapid and convenient
Isolate DNA from a wide range of samples	DNA can be isolated from a wide range of plant and filamentous fungi samples.
Isolate total DNA, including viral DNA	Purified DNA samples can be used for the detection of viral pathogens, as viral DNA is isolated with the plant/fungi DNA.
Rapid and simple processing	Rapid spin-column format allows for the processing of multiple samples in 45 minutes.
High yield of DNA	High yields of purified DNA can be isolated with this kit
No phenol :chloroform extractions	DNA is isolated without the use of harmful chemicals such as phenol or chloroform. The DNA is of the highest quality and can be used in a number of downstream applications

## Plant/Fungi DNA Isolation Kit



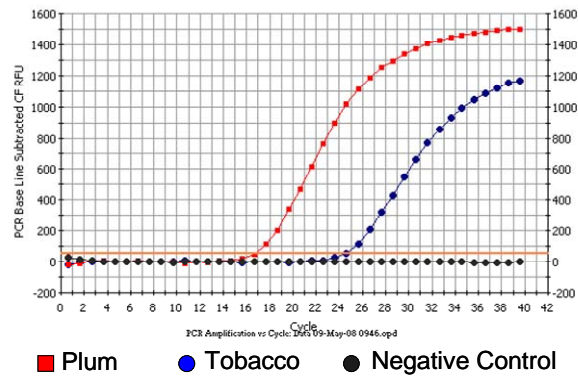
**Figure 1. Isolate DNA from a Wide Range of Plants**  
DNA was isolated from 50 mg samples of tobacco leaves (Lanes 1 and 2), tomato leaves (Lanes 3 and 4), peach leaves (Lanes 5 and 6) and grape leaves (Lanes 7 and 8) using Norgen's Plant/Fungi DNA Isolation Kit, and 5  $\mu$ L aliquots were run on a 1X TAE 1% agarose gel. As it can be seen, high quality DNA was isolated in all cases. High quality DNA isolated in all cases. The M Lanes contain Norgen's HighRanger 1kb DNA Ladder.

### Plant/Fungi DNA Isolation Kit Contents

1. Lysis Solution
2. Wash Solution
3. Elution Buffer
4. RNase A
5. Mini Spin Columns
6. Collection tubes
7. Elution tubes
8. Product Insert

### Shipping Conditions

The Plant/Fungi DNA Isolation Kit is shipped at room temperature.



**Figure 2. Purified DNA Can be Amplified in a qPCR Reaction**

DNA was isolated from 50 mg samples of plum and tobacco leaves using Norgen's Plant/Fungi DNA Isolation Kit, and 2  $\mu$ L of the DNA was used in a qPCR reaction with 18 srDNA primers. The qPCR was successful in amplifying both the plum and tobacco DNA, indicating that the DNA is of a high quality and can be used in sensitive downstream applications.

### Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- $\beta$ -mercaptoethanol
- 96 - 100% ethanol
- 70% ethanol
- Liquid nitrogen (optional)

### Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature, except for the RNase which should be stored at  $-20^{\circ}\text{C}$ . These reagents should remain stable for at least 1 year in their unopened containers.

Cat #	Description	Quantity
26200	Plant/Fungi DNA Isolation Kit	50 samples