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 fungi species. Furthermore, the kit also provides a convenient method for the detection of pathogens which may be infecting a plant, as it allows for the purification of any pathogen DNA along with the purification of the total DNA. Total DNA can be purified from fresh or frozen plant tissues, plant cells or fungi samples using this kit. 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, Southern blotting, SNP analysis and sequencing.

### Kit Specifications

<table>
<thead>
<tr>
<th>Column Binding Capacity</th>
<th>50 µg</th>
<th>Time to Complete 10 Purifications</th>
<th>45 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Column Loading Volume</td>
<td>650 µL</td>
<td>Average Yield*</td>
<td>5 µg</td>
</tr>
<tr>
<td>Maximum Amount of Starting Material:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Tissues</td>
<td>100 mg</td>
<td>Pine Needles (50 mg)</td>
<td>5 µg</td>
</tr>
<tr>
<td>Fungi (wet weight)</td>
<td>100 mg</td>
<td>Grape Leaves (50 mg)</td>
<td>10 µg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plum Leaves (50 mg)</td>
<td>10 µg</td>
</tr>
</tbody>
</table>

### Plant/ Fungi DNA Isolation Kit Benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolate DNA from a wide range of samples</td>
<td>DNA can be isolated from a wide range of plant and fungi samples.</td>
</tr>
<tr>
<td>Isolate total DNA, including viral DNA</td>
<td>Purified DNA samples can be used for the detection of viral pathogens, as viral DNA is isolated with the plant/fungi DNA.</td>
</tr>
<tr>
<td>Rapid and simple processing</td>
<td>Rapid spin-column format allows for the processing of multiple samples in 45 minutes.</td>
</tr>
<tr>
<td>High yield of DNA</td>
<td>High yields of purified DNA can be isolated with this kit.</td>
</tr>
<tr>
<td>No phenol : chloroform extractions</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 \( \mu \text{L} \) 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. Binding Solution
3. Wash Solution I
4. Wash Solution II
5. Elution Buffer
6. RNase A
7. Spin Columns
8. Filter Columns
9. Collection tubes
10. Elution tubes
11. Product Insert

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

Customer-Supplied Reagents and Equipment
- Benchtop microcentrifuge
- 96 - 100% ethanol
- 70% ethanol
- Liquid nitrogen
- 65°C incubator
- Ice bath

Storage Conditions
All solutions should be kept tightly sealed and stored at room temperature, except for the RNase which should be stored at -20°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

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PIS26200-7