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A Geno Technology, Inc. (USA) brand name

GET™ Plant DNA Template

For the Isolation of Plant Genomic DNA Template

(Cat. # 786-355, 786-355T)

INTRODUCTION

GET™ Plant DNA Template is suitable for the preparation of DNA templates from plant samples. The method involves solubilization in Template Extraction Buffer and rapid purification of genomic DNA with a specific genomic DNA binding spin column. The isolated DNA template is suitable for PCR and other applications. The kit is suitable for 20 or 100 preps of 50-100mg plant tissue. The yield is ~30µg DNA per preparation, depending on the plant source and quantity used.

ITEM(S) SUPPLIED

Description	Cat. # 786-355	Cat. # 786-355T
Template Extraction Buffer	2 x 30ml	30ml
GET™ Plasmid Columns, Mini	100	20
Wash I	2 x 50ml	50ml
Wash II	2 x 20ml	20ml
TE Buffer	10ml	1.5ml
LongLife™ RNase	0.5ml	50µl

STORAGE CONDITION

The kit is shipped at ambient temperature. Upon arrival, store the kit components as recommended on the label. The kit components are stable for 1 year, if stored properly.

ADDITIONAL ITEMS REQUIRED

Chloroform

Ethanol, >90% and 70%

PREPARATION BEFORE USE

1. Add 80ml molecular grade ethanol to the Wash II bottle and check the box on the bottle label to indicate ethanol has been added.
2. Equilibrate Elution Buffer to 50-60°C.

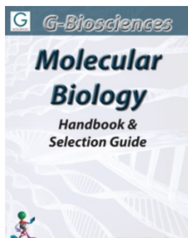
PROTOCOL

1. For optimal yield, freeze 50-100mg plant tissue in liquid nitrogen. Pulverize the tissue whilst frozen to a fine powder. If liquid nitrogen is unavailable go to step 3.
2. Add 600µl Template Extraction Buffer. Vigorously vortex, incubate at room temperature for 20 minutes and then continue at step 4 of main protocol.
3. Alternatively, add 50-100mg fresh diced plant tissue to a microcentrifuge tube containing 300µl Template Extraction Buffer. Homogenize the sample with a microfuge pestle until a homogenous suspension is acquired. Add an additional 300µl Template Extraction Buffer to bring the total volume to 600µl.

4. Add 200µl chloroform and vortex for 5-10 seconds to mix. Centrifuge at 10,000xg for 5 minutes to pellet the debris.
5. Carefully pipette the clear supernatant to a clean 1.5ml tube. Add 600µl 70% ethanol to the sample and vortex for 5-10 seconds to mix.
6. Place a GET™ Spin Column into a 1.5ml centrifuge tube and decant half the supernatant into the GET™ Spin Column.
7. Centrifuge at 6,000xg for 1 minute to bind the genomic DNA to the matrix. Discard the flow through.
8. Add the remaining supernatant to the GET™ Spin Column and repeat step 7.
9. Add 0.5ml Wash-I to the column and centrifuge at 6,000xg for 1 minute. Discard the flow through.
10. Add 0.5ml Wash II to the column and centrifuge at 6,000xg for 1 minute. Discard the flow through.
11. Repeat step 9 two more times for a total of 3 x Wash II washes. After removing the last wash from the lower tube, briefly centrifuge a final time to remove any residual wash.
12. Transfer spin column to a clean 1.5ml microfuge tube.
13. Vortex the LongLife™ RNase and in a clean tube add 1µl LongLife™ RNase to every 25-50µl 50-60°C TE Buffer for each column.
14. Add the pre-warmed RNase:TE Buffer mix directly to the spin column membrane.
15. Incubate at room temperature for 5-10 minutes.
16. Centrifuge at 6,000xg for 1 minute to collect the eluted DNA.
    NOTE: *Retain spin column until DNA recovery is checked. If recovery is poor, add 25-50µl hot (50-60ºC) TE Buffer to the column and repeat steps 14-15. Combine with previous elution.*

RELATED PRODUCTS

Download our Molecular Biology Handbook.



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