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A Geno Technology, Inc. (USA) brand name

GET™ Agarose DNA

For the Extraction of DNA from Agarose Gel

(Cat. # 786-358, 786-359)

INTRODUCTION

The GET™ AGAROSE DNA kit provides a quick and simple method of recovering DNA larger than 100 base pairs from agarose gels. Using concentrated salts, the gel is dissolved and DNA is bound to the high binding affinity GET™ Spin Columns. After several quick centrifugation steps DNA is isolated and purified.

ITEM(S) SUPPLIED

DESCRIPTION	Cat. # 786-358 50 Preps	Cat. # 786-359 100 Preps
Gel Dissolver/ Binder	60ml	2 x 60ml
DNA WASH	20ml	20ml
TE Buffer	1.5ml	2 x 1.5ml
GET™ Plasmid Columns - Mini	1 x 50	2 x 50

STORAGE

The kit is shipped at ambient temperature. All components can be stored at room temperature.

ITEMS NEEDED BUT NOT SUPPLIED

Centrifuge, Collection tubes, TE buffer, isopropanol and molecular grade absolute ethanol

PREPARATION BEFORE USE:

- Prior to the first use, 80ml of molecular grade absolute ethanol must be added to DNA WASH. After adding ethanol, keep the bottle tightly capped and store at -20°C.
- Set a hot water bath or incubator to 55-65°C.
- Heat TE buffer to 55-65°C.

PROTOCOL

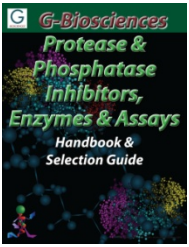
1. Run sample on a 1-2% agarose gel. As a general guideline, to resolve between 500-10,000 base pairs, use 1% agarose gels. For samples in the range of 200-4000 base pairs, use 2% agarose gels.
2. Use a clean razor blade or scalpel to cut the DNA band from the surrounding agarose. Clean away as much excess agarose from the band as possible and transfer agarose piece to a 1.5-2ml centrifuge tube.
   NOTE: *Work quickly to keep exposure of DNA to UV energy to a minimum.*
3. Determine the weight of the gel piece and add 3 volumes of Gel Dissolver/Binder to the tube containing the gel piece. For each 100mg gel piece; add 300µl Gel Dissolver/Binder.
4. Incubate for 5-10 minutes at 55-65°C or until the gel dissolves. Mincing the gel and gentle inversion or mixing while heating will accelerate this process.
5. Add 1 gel volume of isopropanol to the sample and mix by inverting the tube several times. For each 100mg gel piece; add 100µl Isopropanol.
6. Add the sample to the spin column and centrifuge for 1 minute at 14,000-16,000g.
   NOTE: *To maximize recovery apply entire sample to the column. If the volume is too large, apply appropriate volume, centrifuge, discard flow through and then apply remaining sample and repeat.*
7. Discard or save flow through and place column back into collection tube.
8. Add 500µl of Gel Dissolver/Binder to the column and centrifuge for 1 minute at 14,000-16,000g. Discard or save the flow through and place column back in the collection tube.
9. Add 750µl of DNA Wash to the column and centrifuge for 1 minute at 14,000-16,000g.
10. Discard the flow through and centrifuge the column for an additional 1 minute at ≥10,000g to ensure removal of wash.
11. Place column in a clean collection tube and elute the DNA by adding 10-20µl prewarmed TE buffer or water to the center of the membrane in the column and incubate at room temperature for 1 minute. Centrifuge for 1 minute at 14,000-16,000g.
    NOTE: *To maximize yield, the sample can be eluted twice using half the recommended volume each time (2 x 10µl). For DNA fragments or plasmids larger than 5kb increase TE buffer incubation to 5-10 minutes at 55-65°C.*

APPLICATION NOTES

1. DNA fragments ≥100 base pairs are easily isolated using *GET*™ AGAROSE DNA. It is recommended that smaller fragments be isolated using G-Capsule™ electroelution devices (G-Biosciences Cat. # 786-001).
2. For maximal recovery, save the Gel Dissolver/ Binding supernatant from steps 7 and 8 in a clean tube and reapply to the column before proceeding with step 9.
3. An ethanol precipitation can be performed to concentrate DNA samples after elution.

RELATED PRODUCTS

Download our Protease & Phosphatase Inhibitors, Enzyme & Assays Handbook.



http://info.gbiosciences.com/protease-phosphatase-inhibitors-enzymes-assay-handbook

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