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A Geno Technology, Inc. (USA) brand name

OmniPrep™ for Mouse Tail

For High Quality Genomic DNA Extraction from Mouse Tail

(Cat. # 786-401)

INTRODUCTION

The OmniPrep™ for Mouse Tail kit isolates high quality genomic DNA from mouse tail samples. The kit isolates high purity (A_{260}/A_{280} ratios of 1.7 to 2) DNA between 100-200kbp and the yield is 70-80µg/cm tail.

If used according to the protocols this kit purifies DNA from 100-200cm mouse tail.

ITEM(S) SUPPLIED (CAT. # 786-401)

Description	Size
Genomic Lysis Buffer	100ml
DNA Stripping Solution	10ml
Precipitation Solution	30ml
Longlife™ RNase (5mg/ml; 60U/mg)	0.5ml
LongLife™ Proteinase K (5mg/ml)	4 x 0.5ml
TE Buffer	20ml

STORAGE CONDITIONS

The kit is shipped at ambient temperature. Upon arrival, store the kit components as recommended on the label.

ADDITIONAL ITEM(S) REQUIRED

- Chloroform
- Isopropanol
- 70% Ethanol

PREPARATION BEFORE USE

Proteinase K Solution: To avoid repeated freezing-thaw, dispense the Proteinase K solution into aliquots of 30µl/tube and freeze at -20°C.

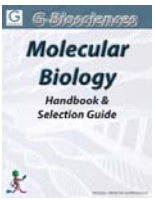
Genomic Lysis Buffer & DNA Stripping Solution: If a precipitate forms due to cold storage allow to warm to room temperature until precipitate dissolves.

PROTOCOL FOR MOUSE TAIL TISSUE

1. Add 0.5-1cm, approximately 50-100mg, mouse tail in to a 1.5ml microcentrifuge tube with 500µl Genomic Lysis Buffer.
2. Add 10µl Proteinase K solution and incubate at 60°C for 3-4 hours to overnight. Invert the tube periodically if possible.
3. Allow the sample to cool to room temperature. Add 200µl chloroform and mix by inverting the tube several times. Centrifuge for 10 minutes at 14,000xg and carefully remove the upper phase to a clean microcentrifuge tube.
4. Add 50µl DNA Stripping Solution to the sample and invert several times to mix. Incubate the sample for 5-10 minutes at 60°C.
5. Add 100µl Precipitation Solution and mix by inverting the tube several times. A white precipitate should be produced, if not add 50µl aliquots of Precipitation Solution until a white precipitate forms.
6. Centrifuge the sample at 14,000xg for 5 minutes.
7. Transfer the supernatant to a clean tube and precipitate the genomic DNA with 500µl isopropanol. Invert the tubes 10 times to precipitate the DNA.
8. Centrifuge at 14,000xg for 5 minutes to pellet genomic DNA. Remove the supernatant.
9. Add 700µl 70% ethanol to the tube and invert several times to wash the DNA pellet. Centrifuge for 1 minute at 14,000xg. In some samples, the pellet may be hard to see at this point and will be loosely attached to the tube.
10. Decant or pipette off the ethanol wash. Invert the tube on a clean absorbent surface for several minutes to allow any excess ethanol to drain away. Do not let the pellet dry completely or it will be difficult to rehydrate.
11. Add 50 to 100µl TE Buffer to the pellet. Incubate at room temperature for at least 15 minutes to rehydrate. Incubating the tube at 55-60°C will speed up rehydration. Incubate for 5-60minutes.
    OPTIONAL: *1µl LongLife™ RNase for every 100µl TE Buffer can be added at this stage.*
12. Store DNA at 4°C, for long-term storage store at -20°C or -80°C.

RELATED PRODUCTS

Download our Molecular Biology Handbook.



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