

GENOMIC DNA ISOLATION FROM MOUSE TAIL CLIPS USING DNAZOL®

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A common method for evaluating the genotype of transgenic mice involves harvesting small tail clips for DNA analysis. A simple method for isolating DNA from mouse tail is presented here.

PROTOCOL

1. Add minced tissue (20 - 40 mg) or a small amount of whole tissue (less than 20 mg) to 1.0 ml of DNAzol® (Cat. No. DN 127) containing 20 µl of proteinase K (20 mg/ml).
2. Incubate the solution overnight at 22 - 37 C. If desired, add 4 µg of RNase to the solution for the last hour of the incubation.
3. Following incubation, centrifuge samples according to the DNAzol protocol at 10,000 g for 10 minutes at 4 °C.
4. Complete processing of the samples by following the rest of the instructions in the DNAzol protocol.

NOTES

1. This application using DNAzol produces 0.4 - 3.0 µg DNA per mg mouse tail tissue. Isolated DNA is appropriate for restriction digestion and PCR analysis.

REFERENCES

1. Chomczynski, P; Mackey, K; Drews, R and Wilfinger, W. 1997. DNAzol®: A Reagent for the Rapid Isolation of Genomic DNA. Biotechniques, 22, 550-553.