

Urine DNA Isolation Kit

Norgen's Urine DNA Isolation Kit provides a fast and simple procedure for isolating DNA from 2 mL of urine. DNA found in urine can be divided into 2 basic categories. The larger species is generally greater than 1 kb in size, and appears to derive mainly from cells shed into the urine from the urinary tract. The second species is smaller, generally between 150 and 250 bp, and derives at least in part from the circulation. Both types of urine DNA can be isolated using this kit.

With Norgen's Urine DNA Isolation Kit, purification is based on spin column chromatography using Norgen's proprietary resin as the separation matrix. The kit allows for the removal of highly concentrated salts, metabolic wastes and proteins, to allow for the isolation of high quality, concentrated DNA. The purified urine DNA is compatible with PCR and Southern Blot analysis.



Kit Specifications			
Volume of Urine Processed	2 mL	Average Yield	Up to 50 ng
Size of DNA Purified	Large (>1kb) and small (150-250 bp)	Time to Complete 10 Purifications	90 minutes

Urine DNA Isolation Kit Benefits

Fast processing	Rapid spin-column format allows for the processing of multiple samples in 90 minutes.
Isolation of both types of urine DNA	Isolate both high molecular weight DNA (greater than 1 kb in size; mostly cell associated) and the smaller DNA (150 - 250 bp; derived from the circulation) (Figure 1).
High quality DNA	Removal of highly concentrated salts, metabolic wastes and proteins provides high quality, concentrated DNA to be used in various downstream applications.
Recovered DNA is suitable for downstream applications	Purified DNA is fully compatible with PCR analysis (Figure 2) and Southern Blot analysis.
No mixing or formulation	Solutions are provided for with no need for formulation.

Urine DNA Isolation Kit

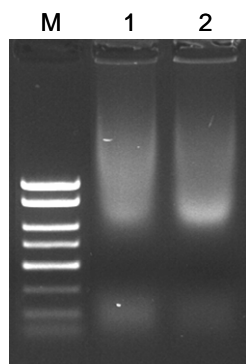


Figure 1. Agarose Gel of DNA Isolated using Norgen's Urine DNA Isolation Kit

DNA was isolated from two different male urine samples using Norgen's kit. The DNA was then run on a 2% agarose gel. As can be seen from the gel picture, the kit is isolating both the larger and smaller species of urine DNA. Lane M is Norgen's FastRunner DNA Ladder, while Lanes 1 and 2 correspond to two different DNA samples.

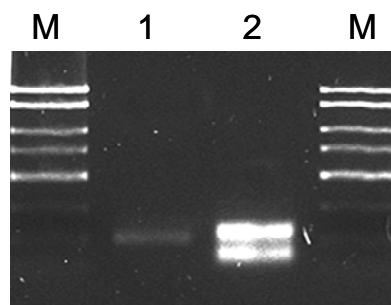


Figure 2. Isolated Urine DNA can be used as the Template in PCR Reactions

DNA was isolated from the urine of a human male using Norgen's kit. The DNA was then used as the template in a nested PCR reaction to detect Y-chromosome-specific DNA sequences. Lane 1 is the 154 bp fragment that resulted from the first PCR, while Lane 2 contains the 154 bp fragment as well as the 77 bp nested fragment. The M lanes contain Norgen's FastRunner DNA Ladder.

Urine DNA Isolation Kit Contents

1. Stabilizer
2. Activation Buffer
3. Binding Solution I
4. Binding Solution II
5. Incubation Solution
6. Elution Buffer
7. Wash Solution
8. Micro Spin Columns
9. Elution Tubes
10. Product Insert

Shipping Conditions

The Urine DNA Isolation Kit is shipped at room temperature.

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors
- 15 mL tubes
- 60°C incubator

Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. All reagents should remain stable for at least 1 year in their unopened containers.

Cat #	Description	Quantity
18100	Urine DNA Isolation Kit	50 samples