

## Enzymatic Reaction Clean-Up Kit

Norgen's Enzymatic Reaction Clean-Up Kit enables the rapid purification of DNA from various enzymatic reaction mixes. This kit is able to purify DNA from different enzymatic reactions including restriction enzyme digests, Klenow reactions, alkaline phosphatase reactions, and ligations. Purification is based on spin column chromatography using Norgen's proprietary resin as the separation matrix. Norgen's resin binds DNA under high salt concentrations and releases the bound DNA under low salt and slightly alkali conditions. The purified DNA can be used in a number of downstream applications including restriction enzyme digestions and ligations.

Norgen's Enzymatic Reaction Clean-Up Kit is able to purify DNA ranging in size from 100 bp to 15,000 bp. Each column has a binding capacity of 25 µg, and the typical purification yield is greater than 90% of the input amount. Each column can be used to purify up to 100 µL of enzymatic reaction.

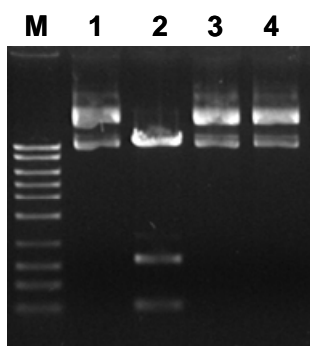


Kit Specifications			
Column Binding Capacity	25 µg	Minimum Elution Volume	30 µL
Size of DNA Purified	100 - 15,000 bp	Maximum Volume Input	100 µL
Average Recovery	> 90%	Time to Complete 10 Purifications	15 minutes

### Enzymatic Reaction Clean-Up Kit Benefits

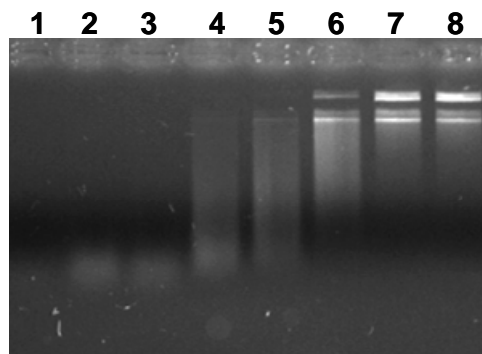
Fast and easy processing	Rapid spin-column format allows for the processing of multiple samples in 15 minutes.
Purification from all types of enzymatic reactions	Purify DNA from different enzymatic reactions including restriction enzyme digests, Klenow reactions, alkaline phosphatase reactions, and ligations (Figure 1 and 2).
High recovery	Typical purification yield is up to 90% of input amount.
Recovered DNA is suitable for downstream applications	Purified DNA is fully compatible with restriction digestions, ligations, and sequencing.

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**Figure 1. Removal of Restriction Enzymes**

Norgen's Enzymatic Reaction Clean-Up kit was used to remove the restriction enzyme *HindIII* from a digestion mixture. Lane 1 contains a control digestion that was immediately stopped by the addition of EDTA. Lane 2 contains control digested DNA. Both lanes 3 and 4 contain digestion reaction that was immediately purified using Norgen's kit. In all cases, the DNA was incubated at 37°C for 1 hour after the specified treatment. No digestion occurred in lanes 3 and 4, and thus Norgen's Enzymatic Reaction Clean-Up Kit is able to successfully remove *HindIII* from a reaction mixture. Lane M is Norgen's MidRanger 1kb DNA Ladder.



**Figure 2. Removal of DNase I**

Norgen's Enzymatic Reaction Clean-Up Kit was used to remove DNase I from a reaction. Lanes 1 to 7 of the gel contain DNA that was incubated with increasing amounts of DNase I for 1 hour, and thus act as control lanes for the digestion. Lanes 1 to 7 correspond to 1U, 0.5 U, 0.1 U, 0.05 U, 0.01 U, 0.005 U and 0.0001 U of DNase respectively. Lane 8 is a digestion of DNA with 0.5 U of DNase I that was immediately purified using Norgen's kit. By comparing lane 8 with the other control lanes, it can be determined that Norgen's Enzymatic Reaction Clean-Up Kit can remove DNase I to <0.0001 U, as virtually no digestion occurred.

### Enzymatic Reaction Clean-Up Kit Contents

1. Binding Solution
2. Wash Solution
3. Elution Buffer
4. Micro Spin Columns
5. Collection Tubes
6. Elution Tubes
7. User Manual

### Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- 96 - 100% ethanol

### Storage Conditions

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

### Shipping Conditions

The Enzymatic Reaction Clean-Up Kit is shipped at room temperature.

Cat #	Description	Quantity
19900	Enzymatic Reaction Clean-Up Kit	50 samples