

# **Endotoxin Removal Kit (Maxi) - For DNA**

Norgen's Endotoxin Removal Kit (Maxi) is designed for the rapid removal of endotoxins from up to 1 mg of previously purified DNA. Endotoxins are cell-membrane components of Gram-negative bacteria such as  $\it E.~coli.$  Endotoxins are released during the lysis step of plasmid purification and significantly reduce transfection efficiencies in endotoxin sensitive cell lines. Therefore, the removal of endotoxins from plasmid preparations is often necessary prior to the use of the DNA in downstream applications. With Norgen's Endotoxin Removal Kit (Maxi) endotoxin levels are efficiently reduced to 0.1 EU/  $\mu g$  DNA or less.



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 Endotoxin Removal Kit (Maxi) can be used to purify plasmids up to 13,000 bp in size, with average recoveries of greater than 90%. The purified DNA is of the highest quality and can be used in a number of downstream applications including sequencing, cloning and transfections.

| Kit Specifications       |                |                                   |                 |  |
|--------------------------|----------------|-----------------------------------|-----------------|--|
| Maximum DNA Input        | 1 mg           | Size of DNA Purified              | Up to 13,000 bp |  |
| Maximum DNA Volume Input | 3 mL           | Average Recovery                  | > 90%           |  |
| Final Endotoxin Level    | ≤0.1 EU/µg DNA | Time to Complete 10 Purifications | 30 minutes      |  |

| Endotoxin Removal Kit (Maxi) Benefits                         |  |  |  |
|---|--|--|--|
| Fast and easy processing                                      | Rapid spin-column format allows for the processing of multiple samples in 30 minutes.                                |  |  |
| Endotoxin-free plasmid DNA                                    | Using Norgen's Endotoxin Removal Kit (Maxi), endotoxin levels are reduced to $\leq 0.1$ EU / $\mu g$ of plasmid DNA. |  |  |
| High recovery of input DNA                                    | The average DNA recovery is > 90% of the input amount  |  |  |
| Recovered plasmid DNA is suitable for downstream applications | Purified plasmid DNA is fully compatible with sequencing, cloning and transfections.                                 |  |  |



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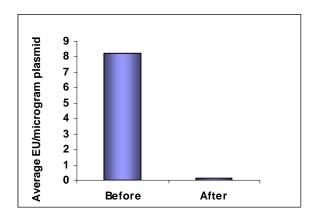


Figure 1. Endotoxin-Free Plasmid DNA

The endotoxin level of a plasmid DNA sample was reduced from over 8 EU /  $\mu$ g to  $\leq$  0.1 EU /  $\mu$ g of plasmid DNA using Norgen's Endotoxin Removal Kit (Mini).

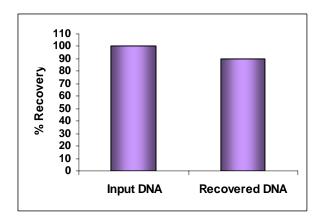


Figure 2. High DNA Recovery

There is very little loss of DNA associated with using Norgen's Endotoxin Removal Kit. Recoveries of plasmid DNA are greater than 90% of the input amount when using this kit.

### **Endotoxin Removal Kit (Maxi) Contents**

- 1. Binding Solution
- 2. Wash Solution I
- 3. Wash Solution II
- 4. Elution Buffer
- 5. Endotoxin Removal Solution
- 6. Spin Columns
- 7. Elution Tubes
- 8. Product Insert

## Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Microcentrifuge tubes
- 96 100% ethanol
- Isopropanol

#### **Shipping Conditions**

The Endotoxin Removal Kit (Maxi) is shipped at room temperature.

### **Storage Conditions**

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

| Cat # | Description                            | Quantity  |
|-------|--|-----------|
| 21900 | Endotoxin Removal Kit (Maxi) - For DNA | 4 samples |

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