

## BAC DNA MiniPrep Kit

The BAC DNA MiniPrep Kit is designed for the rapid preparation of BACs (bacteria artificial chromosomes) and other large DNA constructs from small batch cultures of *Escherichia coli*. 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 process does not require ethanol or other alcohols, a significant improvement over other techniques to achieve full compatibility with alcohol sensitive applications. The purified DNA is free of genomic DNA, RNA and cellular proteins and is suitable for many downstream applications



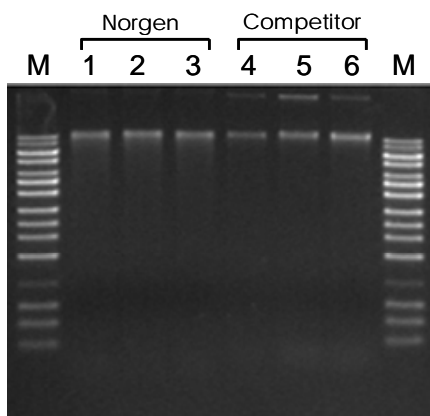
The BAC DNA MiniPrep Kit typically recovers between 0.6 and 1 µg of DNA from 3 mL of bacterial culture. Purification of constructs up to 130 kb in size have been verified.

| Kit Specifications        |               |                                   |            |
|---------------------------|---------------|-----------------------------------|------------|
| Column Binding Capacity   | 25 µg         | Average Yield                     | 0.6 - 1 µg |
| Size of Plasmids Purified | Up to 130 kbp | Time to Complete 10 Purifications | 1 hour     |

### BAC DNA MiniPrep Kit Benefits

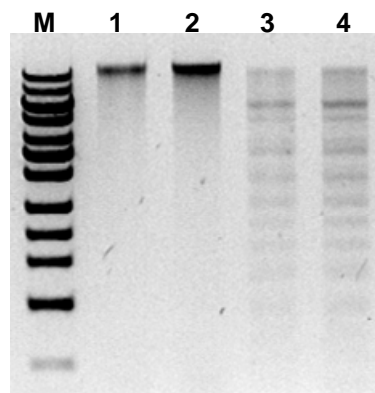
|   |  |
|---|--|
| Fast and easy processing                              | Rapid spin-column format allows for the processing of multiple samples in 1 hour.  |
| High binding capacity of columns                      | The binding capacity of the columns in the BAC DNA MiniPrep Kit is 25 µg.  |
| High recovery   | 0.6 to 1 µg of BAC DNA can be purified from 3.0 mL of bacterial culture.   |
| Recovered DNA is suitable for downstream applications | Purified BAC DNA is fully compatible with restriction enzyme digestions and manual or automated sequencing.                      |
| Alcohol-free protocol                                 | No alcohols are used during the purification process, thus the DNA is compatible with alcohol sensitive downstream applications. |

## BAC DNA MiniPrep Kit



**Figure 1. Higher DNA Yield than Competitor**

BAC DNA from 3 mL overnight cultures was isolated with the Norgen BAC MiniPrep Kit (Lanes 1-3) and with a competitor's kit (Lanes 4-6). Twenty % of recovered DNA was loaded in each lane. Lane M is Norgen's UltraRanger 1kb DNA Ladder. Note the quality, consistency and yield of the DNA isolated using Norgen's kit (Lanes 1-3).



**Figure 2. Full Compatibility with Digests**

BAC DNA isolated with Norgen's BAC DNA MiniPrep Kit is fully digestible. In Figure 2, two different isolated BACs were digested with *Hind*III (Lanes 3 and 4). Lanes 1 and 2 are uncut plasmid, and Lane M is Norgen's UltraRanger 1kb DNA Ladder.

### BAC DNA MiniPrep Kit Contents

1. Resuspension Buffer
2. Lysis Solution
3. Neutralization Solution
4. Binding Solution
5. RNase A
6. RNase T1
7. Wash Solution
8. Elution Buffer
9. Micro Spin Columns
10. Elution Tubes
11. User Manual

### Shipping Conditions

The BAC DNA MiniPrep Kit is shipped at room temperature.

### Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- 1.5 mL microcentrifuge tubes
- 50°C incubator

### Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. The RNase A and RNase T1 should be stored at -20°C upon arrival. Once RNase A has been added to the Resuspension Buffer, the solution should be stored at 4°C. All the reagents should remain stable for at least 1 year in their unopened containers.

| Cat # | Description          | Quantity   |
|-------|----------------------|------------|
| 18000 | BAC DNA MiniPrep Kit | 25 samples |