

E.Z.N.A.[®] Plasmid DNA Mini Kit I

Isolation of 30 µg high quality plasmid DNA from 1-5 mL bacterial cultures

CAT NO: D6942, D6943



RAPID

30 minutes or less processing time



VERSATILE

Spin and vacuum protocols



QUALITY

Sequence quality DNA preparations



SAFE

No phenol-chloroform extractions

COST EFFECTIVE

30% less than the competition on average

E.Z.N.A.[®] Plasmid DNA Mini Kit I

Is designed to isolate up to 30 µg of high quality plasmid DNA from 1-5 mL bacterial cultures in 30 minutes or less. This kit uses a modified alkaline lysis method to lyse the cells and separate genomic DNA from plasmid DNA. Plasmid DNA purification is further simplified by using our HiBind[®] Mini Column technology in 3 quick steps: bind, wash, and elute. Purified plasmid DNA is ready for a wide variety of downstream applications, including routine screening, restriction enzyme digestion, DNA sequencing, cloning, transformation, and transfection.

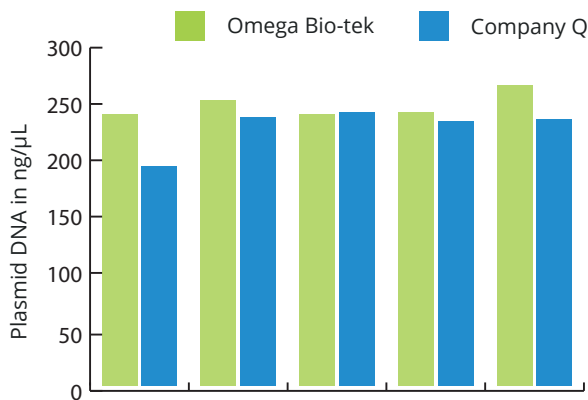


Figure 1

DNA Concentration Comparison

Figure 1. 4 mL DH5α cultures were transformed with pGEM vector according to manufacturer's recommended protocols. Plasmid DNA concentration was determined by optical density measurements with Thermo Scientific's NanoDrop[®] 2000c. Total elution volume was 50 µL.

Table 1

| Sample ID | A ₂₆₀ /A ₂₈₀ | Contiguous Read Length (CRL) on Sanger sequencing | QV20+ |
|-----------|------------------------------------|---|-------|
| 1 | 1.87 | 911 | 920 |
| 2 | 1.89 | 899 | 908 |
| 3 | 1.91 | 888 | 884 |
| 4 | 1.88 | 897 | 908 |
| 5 | 1.85 | 899 | 900 |
| 6 | 1.85 | 906 | 911 |
| 7 | 1.86 | 900 | 911 |
| 8 | 1.87 | 904 | 914 |
| 9 | 1.87 | 895 | 907 |
| 10 | 1.87 | 895 | 910 |
| 11 | 1.89 | 891 | 899 |
| 12 | 1.87 | 909 | 917 |

Plasmid Quality Assessment

Table 1. pGEM plasmid was purified from 1 mL of DH5α cultures following Omega Bio-tek's E.Z.N.A.[®] Plasmid DNA Mini Kit I (Q-spin) protocols with a 50 µL elution volume. Plasmid DNA absorbance ratios were determined using Thermo Scientific's NanoDrop[®] 2000c. Purified plasmid samples had an average CRL of 899.5 bp and an average of 907 bases with a Phred score greater than 20 (≤ 1% probability of error in base calling).

| Product Description | Preps | Cat No. |
|--|-------|----------|
| E.Z.N.A. Plasmid DNA Mini Prep Kit I (Q-spin, capless) | 5 | D6942-00 |
| | 50 | D6942-01 |
| | 200 | D6942-02 |

| Product Description | Preps | Cat No. |
|---|-------|----------|
| E.Z.N.A. Plasmid DNA Mini Prep Kit I (V-spin, attached cap) | 5 | D6943-00 |
| | 50 | D6943-01 |
| | 200 | D6943-02 |

ALSO AVAILABLE IN ENDOTOXIN FREE FORMAT. CAT NO: D6948

For free samples of any of our kits, visit www.omegabiotek.com



innovations in nucleic acid isolation

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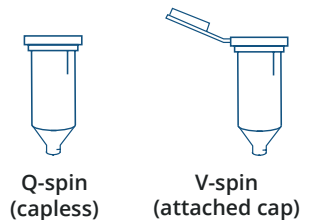
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CAT NO: D6942, D6943

Available Formats

The E.Z.N.A.[®] Plasmid DNA Mini Kit I is available with 2 different types of columns: Q-spin columns are capless (D6942), and V-spin columns have an attached cap (D6943). The columns are otherwise identical in use and application. Either columns can be used with both the vacuum or centrifugation protocols.



Citations

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