

# Column-Pure<sup>™</sup> Bacterial Genomic DNA Kit

## Cat. No. D423-100

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Catalog No.:	D423-100			
Product Name:	Column-Pure <sup>™</sup> Bacterial Genomic DNA Kit			
Size:	100 preps			
Description:	This is a quick and easy spin column method designed for rapid isolation of genomic DNA from cells and bacteria. The kit contains a membrane embedded column for binding up to $10\mu g$ of genomic DNA. Nucleotides, proteins, salts, and other impurities are washed away. Purified genomic DNA can be used in most molecular biology experiments including restriction enzyme digestion, PCR, Southern-blotting, etc.			
Kit Contents:	<b>Digestion Solution R</b>	40ml	Wash Solution	2x10ml
	Proteinase K	1ml	Elution Buffer	10ml

**Storage:** Store all Solutions/Buffers at room temperature; keep Proteinase K at -20°C for long term storage.

25ml

Spin Column Set

100

Caution: Do not inhale or swallow. Keep away from food, drink, and animal feed. Keep out of children's reach. In case of accidental exposure, seek immediate medical attention.

**DNA Binding Buffer** 

All MSDS are available on request.



### **Protocol**

#### 1) **Prepare solutions:**

- **a**). Digestion Solution may form a precipitate during storage. Dissolve the precipitate by warming the solution to 37°C if precipitation is noticed.
- **b).** Before use, add 40ml of 95-100% ethanol to the 10ml **Wash Solution** bottles.

#### 2) Bacterial sample collection:

Collect bacterial cells from 100-500 $\mu$ l of overnight culture by centrifugation. Remove the supernatant and resuspend the cells in 200 $\mu$ l H<sub>2</sub>O.

#### 3) Digestion:

Add 300 $\mu$ l of **Digestion Solution R** to the sample tube from above step, add 8 $\mu$ l of the **Proteinase K** solution and mix well. Incubate the sample at 55°C for 10 minutes.

#### 4) **DNA Binding:**

Add 200µl **DNA Binding Buffer** to the above digested sample, mix well by shaking or votexing. Spin at full speed for 5 minutes. Transfer up to 700µl supernatant to the **Spin Column**. Centrifuge the **Spin Column** containing the sample mixture at full speed for one minute and discard the flow-through.

#### 5) Washing:

Add 500 $\mu$ l **Wash Buffer** to the column, centrifuge at full speed for one minute and discard the flow-through. (**Optional Wash**: Add another 500 $\mu$ l **Wash Buffer** to the column, centrifuge and discard the flow-through.) After the wash step, re-centrifuge the column at full speed for another minute to completely remove any residual **Wash Buffer**.

#### 6) <u>Elution:</u>

Transfer the column to a clean 1.5ml microcentrifuge tube, add 50-100 $\mu$ l Elution Buffer to the center of the column and centrifuge at full speed for one minute to collect the purified DNA. (Using 50 $\mu$ l Elution Buffer will result in higher concentration of DNA; while using 100 $\mu$ l Elution Buffer will result in more complete recovery of DNA.)

**Note:** Measure DNA quantity by UV absorption at A260 and assess genomic DNA quality on a 0.7% agarose gel. The length of genomic DNA is around 50 kb. The purified bacterial genomic DNA should be good for most of the downstream molecular biology experiments.



## Easy Ways to Order

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- E-Mail: Orders@lamdabio.com
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