molecular designs

PRODUCT INFORMATION

Column-Pure Bacterial Genomic DNA Kit

Cat. No. D423-100

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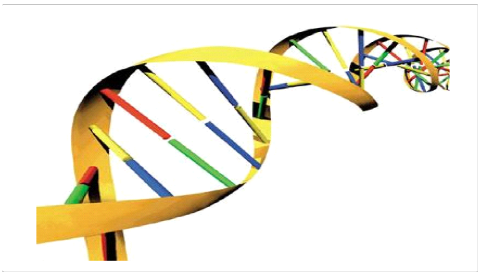

2 Perimeter Park South | Suite 200W |
Birmingham, AL 35243 | 800.314.0182

research.moleculardesigns.com
CustomerSuccess@MolecularDesigns.com

PRODUCT INFORMATION

Catalog No.: D423-100

Product Name: **Column-Pure 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 10µg 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:	**Digestion Solution R**	40ml	**Wash Solution**	2x10ml
	Proteinase K	1ml	**Elution Buffer**	10ml
	DNA Binding Buffer	25ml	**Spin Column Set**	100

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

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.

All MSDS are available on request.

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Protocol

1) **Prepare solutions:**
   a). Digestion Solution may form a precipitate during storage. Dissolve the precipitate by warming the solution to 37ºC 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 100-500µl of overnight culture by centrifugation. Remove the supernatant and resuspend the cells in 200µl H_2O.

3) **Digestion:**
   Add 300µl of **Digestion Solution R** to the sample tube from above step, add 8µl 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 500µl **Wash Buffer** to the column, centrifuge at full speed for one minute and discard the flow-through. (**Optional Wash**: Add another 500µl **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) **Elution:**
   Transfer the column to a clean 1.5ml microcentrifuge tube, add 50-100µl **Elution Buffer** to the center of the column and centrifuge at full speed for one minute to collect the purified DNA. (Using 50µl **Elution Buffer** will result in higher concentration of DNA; while using 100µl **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.