SPINeasy™ DNA Purification Kit

Cat. No.: 116548050 (50 PREPS) / 116548000 (5 PREPS)

Quick-Start Protocol

Revision Oct 2023

Scan QR code for more information from instruction manual

This protocol is designed to purify up to 50 µg DNA with a size ranging from > 200 bp to high molecular weight genomic DNA. The expected recovery is >80%.

Notes before starting:

- This protocol requires the use of a centrifuge capable of generating at least 15,000 *g* to obtain optimal results.
- For faster processing, the protocol is compatible with vacuum manifold (see below).
- The kit includes 2 binding buffers. The **Buffer P1** is recommended for most application. Use the **Buffer P1HA** only with samples with considerable contamination of humic substances (intense brownish color).

Column preparation

- Add **200 µL Equilibration Buffer** into **Column P** placed in **2.0 mL Collection Tubes** (provided), centrifuge for **1 min @ 15,000 *g*** . Discard the flow-through and reuse the collection tube.

Sample preparation

1. A maximum of 50 µg of DNA resuspended in volume as large as 200 µL can be used.

-Buffer P1 : Mix **5 volumes** of **Buffer P1** to **1 volume** of the DNA sample in a microcentrifuge tube (not provided).

-Buffer P1HA : **Shake vigorously Buffer P1HA for 2-5 sec before use**. Add **5 volumes** of **Buffer P1HA** to **1 volume** of the DNA sample in a microcentrifuge tube (not provided). Centrifuge for **1 min @ 15,000 *g***. Take care to avoid the dark pellet, transfer the entire volume of supernatant to **Column P** in the next step.

Bind

Microcentrifuge

2. Apply the sample to Column P and centrifuge for **10-30 sec @ 15,000 *g*** and discard the flow-through. Repeat the process if needed until all the lysate has passed through the Column P.

Vacuum manifold

2. Insert Column P into the vacuum manifold's luer connectors. To bind DNA, apply the sample and **apply vacuum**. Repeat until all the lysate has been loaded if needed. **Switch off** the vacuum source to avoid membrane overdying.

Wash

3. Transfer the Column P into new **2.0 mL Collection Tubes** (provided). Add **700 µL Buffer P2** to the center of the column, centrifuge for **10-30 sec @ 15,000 *g***. Discard the flow-through and place the Column P back into the same 2.0 mL Collection Tube.
4. Add **700 µL Buffer P3** to the center of the column and centrifuge for **1min @ 15,000 *g***.

3. Add **700 µL Buffer** P2 to the center of the column and apply vacuum. **Switch off** the vacuum source.
4. Add **700 µL Buffer P3** by running the pipette tip along the wall of the column and **apply vacuum**.

5. Transfer the Column P into new **2.0 mL Collection Tubes** (provided), centrifuge for **2 min @ maximum speed** to dry the column.

Elute

6. Transfer Column P into new **1.5 mL Collection Tubes** (provided) and add **30-50 µL Buffer P4** to the middle of the column membrane, centrifuge for 1**0 sec @ ≥15,000 *g***. Retake the eluate and load again into the column for a maximal concentration or add fresh **30-50 µL Buffer P4** for maximal yield. Wait **1 min** and centrifuge for **2 min @ maximum speed**.

   For high molecular weight DNA, a waiting time of **5 min** for the second elution is recommended.

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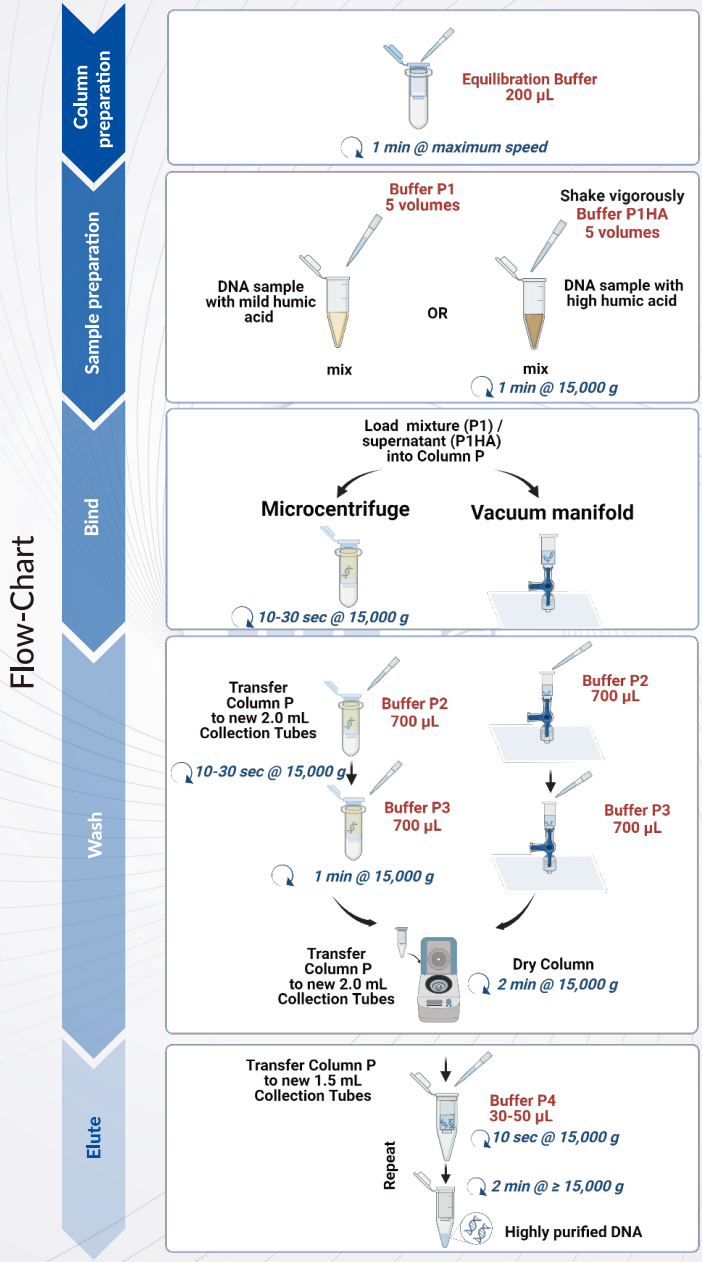
Flow-Chart



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