EasyPure® Buccal Swab Genomic DNA Kit

Cat. No. EE201

Storage: At room temperature (15-25°C) for one year.

Description

EasyPure® Buccal Swab Genomic DNA Kit is optimized to isolate Genomic DNA from Buccal Swabs (cotton swab or nylon flocked swab). Samples are lysed by Proteinase K and unique lysis buffer. DNA is bound to silica-based column and eluted by Elution Buffer or ddH_2O. The purified DNA is suitable for PCR, qPCR, restriction enzyme digestion, and other molecular biology applications.

- Simple and fast: column based purification, no organic extraction or ethanol precipitation.
- High yield: DNA yield up to 4 μg.
- High quality: complete removal of contaminants and inhibitors.

Kit Contents

Component	EE201-01 (50 rxns)
Lysis Buffer 20 (LB20)	25 ml
Binding Buffer 20 (BB20)	25 ml
Clean Buffer 20 (CB20)	6 ml
Wash Buffer 20 (WB20)	12 ml
Proteinase K (20 mg/ml)	1 ml
Elution Buffer (EB)	10 ml
Genomic DNA Spin Columns with Collection Tubes	50 each

Things to do before starting

1. Prepare 56°C water bath or heating block.
2. Add 24 ml 96%-100% ethanol to CB20 and 48 ml 96%-100% ethanol to WB20, mix thoroughly.

Procedure (all centrifugation steps are performed at room temperature)

1. Place a buccal swab into a 2 ml microcentrifuge tube, then cut off the stem.
2. Add 400 μl LB20 and 20 μl Proteinase K, mix by vortexing for 10 seconds.
3. Incubate at 56°C for 30 minutes, votex 3-5 times during the incubation.
   (optional: if RNA-free genomic DNA is needed, add 10 μl of RNase A（20 mg/ml, Cat. No. GE101）to the lysate, incubate at room temperature for 2 minutes)
4. Add 400 μl BB20 and mix by vortexing for 10 seconds.
5. Add 200 μl ethanol (96-100%) to the lysate, vortex for 15 seconds. Briefly centrifuge the tube to remove drops from the inside of the lid.
6. Carefully transfer 600 μl lysate to a Genomic DNA Spin Column, centrifuge at 12,000×g for 30 seconds and discard the flow-through.
7. Carefully transfer the remaining lysate to the Spin Column (for higher yield, use a pipette tip to squeeze lysates off the swab), centrifuge at 12,000×g for 30 seconds and discard the flow-through.
8. Add 500 μl CB20 (check to ensure ethanol has been added), centrifuge the tube at 12,000×g for 30 seconds, discard the flow-through.
9. Add 500 μl WB20 (check to ensure ethanol has been added), centrifuge the tube at 12,000×g for 30 seconds, discard the flow-through.
10. Repeat step 9 once.

11. Centrifuge the empty Spin Column at 15,000×g for 2 minutes. Open the lid of the tube and air-dry the Spin Column at room temperature.
12. Place the Spin Column in a sterile 1.5 ml microcentrifuge tube. Add 30-100 µl Elution Buffer or distilled water (pH >7.0) to the center of the membrane (for higher yield, prewarm Elution Buffer or water to 65°C). Incubate at room temperature for 1 minute. Centrifuge at 12,000×g for 1 minute to elute DNA.

Note

- Samples should be collected by standard methods and stored at appropriate buffers for less than three months.
- Use sterile tubes and pipette tips to avoid contamination.
- For long term storage, store the purified DNA at -20°C.

FOR RESEARCH USE ONLY