MagicPure® Buccal Swab Genomic DNA Kit

Please read the data sheet carefully prior to use.

Cat.No： EC901

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

Description

MagicPure® Buccal Swab Genomic DNA Kit uses a unique lysis buffer and Proteinase K to lyse the cells on buccal swabs, and the DNA is specifically adsorbed by magnetic beads. It is suitable for isolating genomic DNA from buccal swabs (cotton swabs or nylon flocking swabs). The purified genomic DNA is suitable for PCR, qPCR, enzyme digestion, library construction and other downstream experiments.

Highlights

• Simple and fast, no centrifugation required

• High yield, high purity

Starting material

Buccal swab: samples should be stored at ambient temperature and dry conditions within three months

Kit Contents

Component	EC901-01 (50rxns)
Binding Buffer 35 (BB35)	20 ml
Clean Buffer 35 (CB35)	25 ml
Wash Buffer 35 (WB35)	20 ml
Elution Buffer (EB)	10 ml
Proteinase K (20 mg/ml)	1 ml
Magnetic Buccal Swab Beads	1.5 ml

Procedures

Before starting, add the below indicated volume of 100% ethanol into CB and WB.

Component	**Volumes**
Clean Buffer 35 (CB35)	25 ml 100% ethanol
Wash Buffer 35 (WB35)	80 ml 100% ethanol

Genomic DNA extraction from buccal swabs

1. Vortex the swab and the entire storage buffer in the tube together for 1 minute to elute the sample from the swab thoroughly. Pipette 300 µl l supernatant into a 1.5 ml microcentrifuge tube.

2. Add 300 µl l of BB35 and 20µl l of Proteinase K into the microcentrifuge tube. Mix well by vortexing.

3. Incubate at 65°C for 15 minutes, and vortex 3-5 times during incubation.

4. Add 400 µl l of isopropanol to the microcentrifuge tube. Mix well by vortexing.

5. Pipet 30µl l of beads into the microcentrifuge tube. Vortex the microcentrifuge tube for 1 minute, and then incubate at room temperature for 2 minutes. Repeat for 3 times, and then place the microcentrifuge tubes onto the magnetic stand until the solution is clear.

6. Remove the supernatant by pipetting carefully (avoid pipetting any beads). Add 800 µl l of CB35,

and vortex the microcentrifuge tube for 2 minutes. Then place the microcentrifuge tubes onto the magnetic stand until the solution is clear.

7. Remove the supernatant by pipetting carefully (avoid pipetting any beads). Add 750 µl l of WB35, and vortex the microcentrifuge tube for 2 minutes. Then place the microcentrifuge tubes onto the magnetic stand until the solution is clear.

8. Remove the supernatant by pipetting carefully (avoid pipetting any beads). Add 750 µl l of WB35, and vortex the microcentrifuge tube for 2 minutes and mix well. Then place the microcentrifuge tubes onto the magnetic stand until the solution is clear.

9. Try to pipet the supernatant thoroughly. Air dry the beads for 5-10 minutes to allow the ethanol volatilizes completely (Make sure no residual liquid remains at the bottom of the tube).

10. Add 50-100 µl l of Elution Buffer, and vortex the microcentrifuge tube for 60 seconds. Incubate the buffer at 65°C for 10 minutes (vortex the microcentrifuge tube for 2-3 times during the process). Then place the microcentrifuge tubes onto the magnetic stand until the solution is clear. Transfer the supernatant by pipetting carefully into a new microcentrifuge tube, and store the DNA at -20°C.

Note

- Use fresh sample and avoid repeated thawing and freezing to ensure the quality of the purified DNA.
- Beads must be mixed well before using.
- Use sterile tubes and pipette tips to avoid the DNase contamination.

FOR RESEARCH USE ONLY