Version: 12/2023

Magbead Stool DNA Midi Kit (24 Auto Plate)

Cat. No. : CW3067S (24 preps)

Storage Condition: Buffer RIL is stored at 2-8°C, other components are stored at room temperature (15-30°C) for 12 months. Buffer RIL is shipped in cryogenic ice packs, others can be shipped at 0-40°C. Shipping time is recommended to be no more than 7 days.

Components

Component	CW3067S 24 preps
24 Auto Plate (Stool DNA)-1	1 Plate
24 Auto Plate (Stool DNA)-2	1 Plate
24 Auto Plate (Stool DNA)-3	1 Plate
24 Auto Plate (Stool DNA)-4	1 Plate
24 Auto Plate (Stool DNA)-5	1 Plate
24 Auto Plate (Stool DNA)-6	1 Plate
Tips pack	1 Pack
Proteinase K	2×1.25 mL
RNase A	280 μL
Buffer RIL	13 mL

Introduction

This kit provides a method for the extraction of DNA from stool supernatant samples, including human-derived cells and gram-negative bacteria. The unique buffer system enables efficient and specific binding of nucleic acids to magbeads. After rinsing, high-purity DNA is eluted in elution buffer or deionized water. The purified DNA is of good purity and high yield, and can be used for downstream experiments such as methylation conversion, PCR and fluorescent quantitative PCR.

The kit can be matched to the CWE240 for simple and rapid high-throughput extraction, greatly reducing experimenter workload and human error in experiments.

Reagents to Be Supplied by User

1. 24-channel nucleic acid extractor
2. Isopropanol

Precautions

Freezing and high-speed centrifugation of pre-assembled plates is strictly prohibited. Freezing and high-speed centrifugation may cause irreversible damage to Magbeads.

Protocol

1. Shake and mix the stool collection tube well. Centrifuge the stool collection tube at 4500 rpm for 2 min to settle the stool particles.

   Note: This kit can only be used with lysis-enabled stool collection tubes, which are not supplied. If required, please order stool collection tubes.
2. Take 1.35 mL of supernatant into a 2 mL centrifuge tube, add 0.45 mL of Buffer RIL, invert for several times, then vortex for 10 s and centrifuge at 13000 rpm for 2 min. Take 1.2 mL of intermediate clear liquid for standby.

   Note: 1) Buffer RIL is taken out before use and stored at 2-8℃ immediately after use.

   2) Avoid absorbing solid particles and floaters when absorbing the clear liquid.
3. Take the pre-assembled plate out of the kit and centrifuge at 300 ×g for 10 s.
4. Take the pre-assembled plate out of the centrifuge, carefully remove the sealing film, and prevent the plate from vibrating during the process.
5. Add 1.2 mL of centrifuged sample, 60 μL of Proteinase K and 10 μL of RNase A to each well of 24 Auto Plate (Stool DNA)-1.

6. Place the pre-assembled plate in the corresponding position of CWE240 according to the following table.

Name	Position
24 Auto Plate (Stool DNA)-1	1
24 Auto Plate (Stool DNA)-2	2
24 Auto Plate (Stool DNA)-3	3
24 Auto Plate (Stool DNA)-4	4
24 Auto Plate (Stool DNA)-5	5
Tips pack	5
24 Auto Plate (Stool DNA)-6	6

7. Run the CW3067 program. After the program has paused, remove the 24 Auto Plate (Stool DNA)-1 from the extractor and add 1.45 mL isopropanol to each well.
8. Place the 24 Auto Plate (Stool DNA)-1 back into the extractor and continue running the program. When the program has finished, remove the tips pack and the 24 Auto Plate. Transfer the DNA elution product from the 24 Auto Plate (Stool DNA)-6 to centrifuge tubes and store at -20°C.