

MagCore® Genomic DNA Bacterial Kit

For extraction of genomic DNA from bacteria.

Applicable Models : HF16, Compact, HF48, Super, HF16 Plus, Plus II

Cartridge Code 502

Cat.No.MBB-01//MBB-02

Kit Contents

Check that the following parts are included in addition to the main unit:

Cat.No. MBB-01 Contents:

Pre-filled Cartridge Reagent.....	36 pcs.
Pipet Tip plus Holder Set.....	36 sets.
Sample Tube.....	36 pcs.
Elution Tube.....	36 pcs.
Lysozyme Reaction Buffer(15ml).....	1 pcs.
Proteinase K(11mg).....	2 pcs.
PK Storage Buffer.....	2 pcs.
RNase A(50mg/ml, 160µl).....	1 pcs.

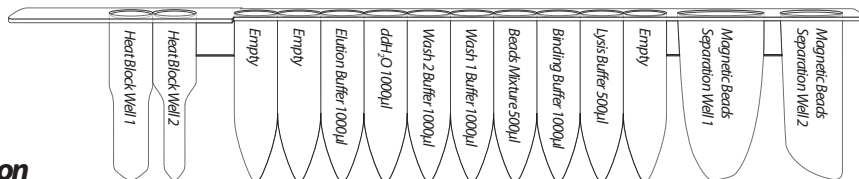
Cat.No. MBB-02 Contents:

Pre-filled Cartridge Reagent.....	96 pcs.
Pipet Tip plus Holder Set.....	100 sets.
Sample Tube.....	100 pcs.
Elution Tube.....	100 pcs.
Lysozyme Reaction Buffer(30ml).....	1 pcs.
Proteinase K(11mg).....	4 pcs.
PK Storage Buffer.....	4 pcs.
RNase A(50mg/ml, 400µl).....	1 pcs.

Storage and Stability:

1. This kit should be stored at room temperature.
2. Proteinase K should be stored at 2-8°C upon arrival.
3. For long term storage, RNase A should be stored at 2-8°C.
4. Shelf Life: 18 Months.

Cartridge Contents :



Description

MagCore® Genomic DNA Bacterial kit is designed to extract genomic DNA from both Gram+ and Gram- bacteria via MagCore® auto-extraction instrument. The kit contains all required reagent and labware for automated purification using magnetic-particle technology. Easy select program code number 502 in MagCore® and combine using MagCore® Genomic DNA Bacterial Kit can extract high quality genomic DNA.

Applications

Using magnetic-particle technology to purify genomic DNA from both Gram+ and Gram- bacteria. The purified genomic DNA can be directly used for downstream application such as quantitative PCR, restriction enzyme digestion, southern blotting, etc.

Preparation before using

1. Add 1.1ml PK Storage Buffer to the Proteinase K tube and mix by vortexing. Store prepared Proteinase K (10mg/ml) at 2-8 °C
2. Freshly prepared 20mg/ml Lysozyme solution before use. (for Gram + bacteria isolation, Lysozyme solution is necessary)
Lysozyme (not provided) + Lysozyme Reaction Buffer = Lysozyme Solution

For Sputum Specimens

Specimens Decontamination

1. Fresh prepare 0.5% NALC in 2% NaOH, 1.5% Na-Citrate solution.
(Ex: 0.25g NALC in 50mL NALC-NaOH solution)
2. Mix 10mL specimen with 10mL NALC-NaOH sol'n, RT°C for 15 min.
3. Add 25mL PBS, mix and centrifuge 3000 x g for 15 min.
4. Discard supernatant, resuspend pellet with 200µl Lysozyme solution and transfer to the MagCore® Sample Tube.
5. Incubate for at least 30min at 37°C. During incubation, vortex the tube every 5min.

Cell Lysis

1. Add 4µl RNase A (50mg/ml) to sample mixture(including any precipitate) and vortex to mix sample.
2. Incubate at room temperature for 10min.
3. Resuspend sample mixture by pipetting.
4. Adding 40µl Proteinase K(10mg/ml) to sample mixture and vortex to mix sample.
5. Put the prepared Sample Tube into the correct well of T-Rack. (see page 3-10)
6. Put Elution Tube and Tip Plus Holder Set (HF16, Compact) / Pipette Tip (Super, Plus) into the correct wells of the T-Rack. (see page 3-10)
7. Run Code 502 program at MagCore®.

General Protocol

1. Harvest bacteria (maximum 5×10^6 cells) into the MagCore® Sample Tube by centrifuging at 5000 x g(8000rpm) for 3min. Discard supernatant.
2. Resuspend bacterial pellet in 200µl Lysozyme Solution by vortexing or pipetting. (if target is Gram- bacteria, please use Lysozyme Reaction Buffer)
3. Incubate for at least 30min at 37°C and vortex the tube every 5min. (for Gram- bacteria isolation, you can skip this step)
4. Add 4µl RNase A (50mg/ml) to sample mixture(including any precipitate) and vortex to mix sample.
5. Incubate at room temperature for 10min.
6. Resuspend sample mixture by pipetting.
7. Adding 40µl Proteinase K(10mg/ml) to sample mixture and vortex to mix sample.
8. Put the prepared Sample Tube into the correct well of T-Rack. (see page 3-10)
9. Put Elution Tube and Tip Plus Holder Set (HF16, Compact) / Pipette Tip (Super, Plus) into the correct wells of T-Rack. (see page 3-10)
10. Run Code 502 program at MagCore®.