



DNA extraction and purification kit (magnetic beads based)

✉ info@ezassay.com

🌐 www.ezassay.com

EZassay Biotechnology Ltd.

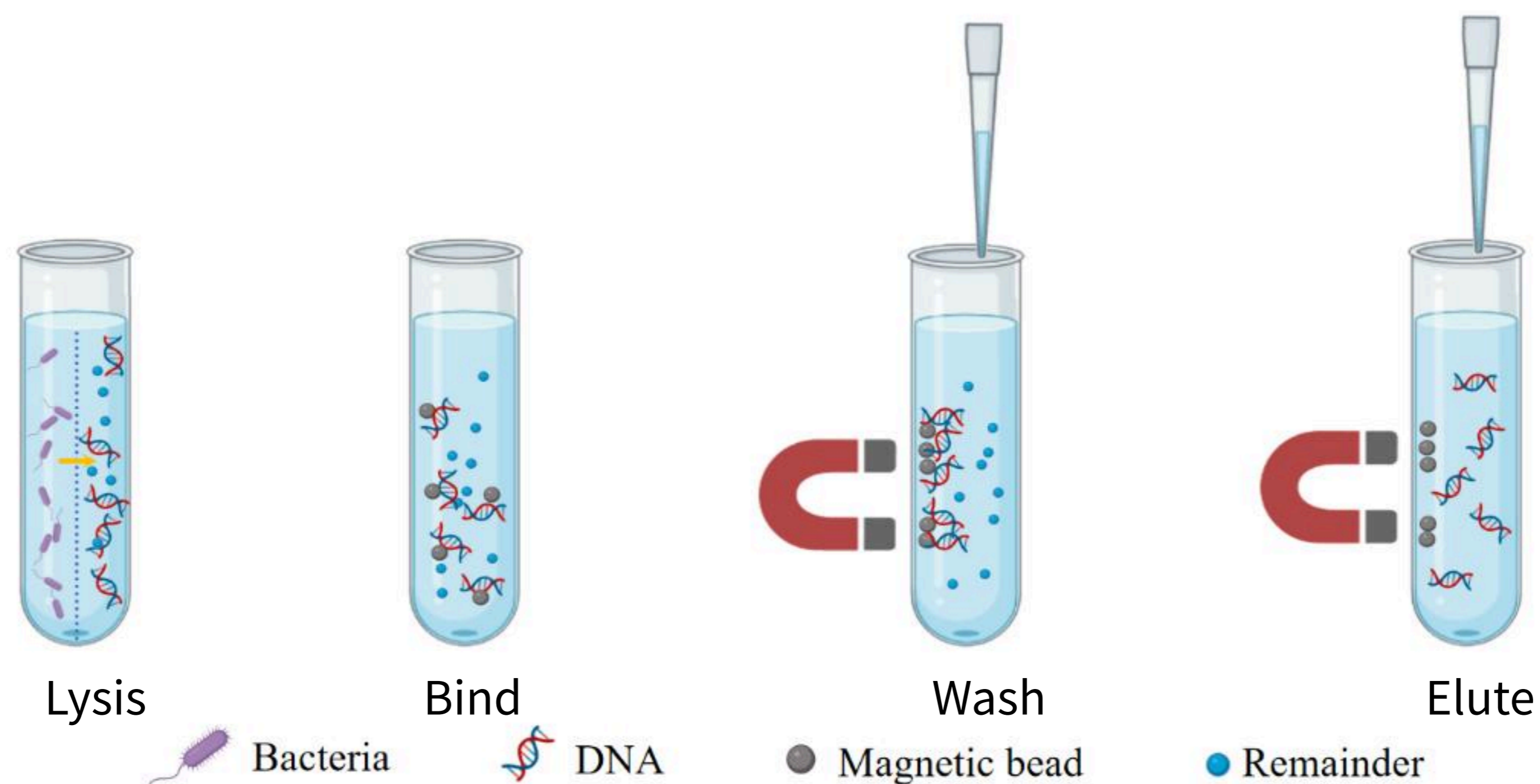
Catalog Code: MB-WG-050
MB-WG-200

CONTENTS

| <u>Contents</u> | <u>Page</u> |
|-------------------------------------|-------------|
| Brief introduction | 1 |
| Application | 1 |
| Materials supplied | 1 |
| Required materials but not supplied | 2 |
| Procedure | 2 |

Brief introduction

The uniquely embedded magnetic beads have a strong affinity for nucleic acids under certain conditions, and when the conditions change, the magnetic beads release adsorbed nucleic acids, which can achieve the purpose of rapid isolation and purification of nucleic acids.



Application

DNA extraction, enrichment, and purification. For example, extract genomic DNA from bacteria or cells.

Materials supplied

| Component | Cat. NO.: MB-WG-050 Package size=50 tests | Cat. NO.: MB-WG-200 Package size=200 tests | Store |
|--------------------------|--|---|------------------|
| Magnetic bead suspension | 1ml | 1ml*4 | 2~8°C |
| Lysis buffer* | 15ml | 60ml | Room temperature |
| Wash buffer A | 16ml | 16ml*4 | Room temperature |
| Wash buffer B | 20ml | 20ml*4 | Room temperature |
| Elution buffer | 5ml | 20ml | Room temperature |

*Check the Lysis Solution for salt precipitation before each use. Re-dissolve any precipitate by warming the solution to 37°C, then mix well and cool to 25°C before use.

Required materials but not supplied

- i. 100% isopropanol, molecular biology grade.
- ii. 100% ethanol, molecular biology grade.
- iii. Vortex.
- iv. Centrifuge, 1.5 mL centrifuge tubes.
- v. Pipettes and pipette tips.
- vi. Magnetic particle processing rack.

Procedure

Ensure that ethanol was added to Wash Buffer A & Wash Buffer B before the first use.

| 组成 | Wash buffer A | Wash buffer B |
|---------------------|---------------|---------------|
| Concentrated buffer | 16ml | 20ml |
| 100% Ethanol | 64ml | 60ml |
| Total | 80ml | 80ml |

1. Take out the magnetic bead suspension from 2-8°C and equilibrate to room temperature. Mix and resuspend on a vortex to a visibly homogeneous suspension and ensure that no settling occurs prior use.
2. Transfer 200µl of sample to a 1.5ml centrifuge tube. Add 300µL of lysis buffer. Mix well by vortex. Briefly spin down the tube to collect droplets.
3. Add 20µl of magnetic bead suspension and 350µl of isopropanol. Incubate for 10 minutes in mixer. Briefly spin down the tube to collect droplets.
4. Place the centrifuge tube on the magnetic stand for 3 minutes, or until the beads have formed a tight pellet. Without removing the tube from the magnetic rack, remove and discard the supernatant carefully by using a pipette.
5. Add 700 µl of wash buffer A. Mix well by using vortex for 1 minute. Briefly spin down the tube to collect droplets.

6. Place the centrifuge tube on the magnetic stand for 3 minutes, or until the beads have formed a tight pellet. Without removing the tube from the magnetic rack, remove and discard the supernatant carefully by using a pipette.
7. Repeat steps 5 and 6;
8. Add 700 μ l of washing buffer B. Mix well by using vortex for 1 minute. Briefly spin down the tube to collect droplets.
9. Place the centrifuge tube on the magnetic stand for 3 minutes, or until the beads have formed a tight pellet. Without removing the tube from the magnetic rack, remove and discard the supernatant carefully by using a pipette.
10. Repeat steps 8 and 9;
11. Without removing the microcentrifuge tube from the magnetic rack, open the lid for 10 minutes at room temperature. Allow residual ethanol to volatilize.
(Note: avoid complete drying of the beads.)
12. Add 50-100 μ l of elution buffer. Resuspend the beads by using pipette. Incubate in a metal bath at 65°C for 5-10 minutes.
13. Briefly spin down the tube. Place the tube on the magnetic rack for 5 minutes or until the beads have formed a tight pellet. Transfer the supernatant to a new centrifuge tube.
14. The solution can be stored at -20°C for a short period of time and at -80°C for a long time.