

# DNA Agarose Gel Recovery Kit (Magnetic Bead Method)

**Cat No.:** DM1200 **Package:** 50T/ 100T

Storage: 2-8°C

Component	50T	100T	Storage
Solution I	40mL	80mL	RT
Wash Buffer	7.5 mL	15mL	RT
Elution Buffer	3 mL	6mL	RT
Magnetic Bead	1 mL	2 mL	2-8°C Do not freeze
Instruction	1 份	1 份	

## **Product Description:**

The magnetic bead method gel recovery kit enables the magnetic beads to specifically recognize and efficiently bind to DNA molecules in an agarose sol solution containing DNA, and can isolate DNA from the sample under an external magnetic field force.

### **Advantages:**

The magnetic bead method has the incomparable advantages of the traditional column method. To get rid of the manual operation process of repeated centrifugation in the process of DNA extraction by column method, it has the advantages of simple operation, short time, safety, automatic extraction and so on.

#### **Operation steps (for reference only):**

Please add absolute ethanol to the rinse solution before use, and refer to the label on the bottle for adding volume (If 50T requires 22.5ml of absolute ethanol alone, 100T requires 45ml of absolute ethanol alone).

1. The cut glue was weighed into a centrifuge tube and added to reagent I. The amount of reagent I refer to the following table below (for example, 1000bp, 100mg of glue and  $50\mu L$  of reagent I).

Range of recovered	Ratio of glue weight to	
fragments (bp)	reagent I volume	
≥ 5000bp	G1:1°°	
≤ 500bp	1:2	
500bp < bp < 5000bp	2:1	

2. The above centrifuge tube is heated in a 60°C-70°C water bath for about 10 min until the glue is completely dissolved. Then, the centrifuge tube can be removed from the water bath and mixed well for 2-3 times to facilitate gel dissolution.



- 3. After gel dissolution, remove the centrifuge tube from the water bath, place the centrifugal tube at room temperature, add  $80\mu$ L isopropyl alcohol (self), gently blow and suck and mix well with a pipette, add  $20\mu$ L magnetic beads, blow with a pipette and mix at room temperature for 3-5 times (or mix on the mixing instrument), place the centrifuge tube in the magnetic frame, until the magnetic beads are completely adsorbed, the solution is clear, suck out the pipe wall with a pipette, pay attention not to suck the magnetic beads.
- 4. Add 500μL of rinsing solution (use with absolute ethanol) and mix with a vortex oscillator. The centrifuge tube is placed in the magnetic frame. After the magnetic beads are fully adsorbed in the magnetic frame, suck and absorb the residual fluid with a pipette along the tube wall. Be careful not to absorb the magnetic beads.
- 5. Put the centrifuge tube on the magnetic frame to open the lid of the centrifuge tube, dry at room temperature for 5 min, observe the wall and the bottom liquid volatile completely and smooth surface, note drying time is not too long, will make the magnetic bead is not easy to elute (if observed at the bottom of the residual rinse, with a pipette discard residual rinse, do not suck to the magnetic beads).
- 6. Remove the centrifuge tube on the magnetic frame, add  $30\text{-}50\mu\text{L}$  of eluent, vortex the oscillator or blow well with a pipette. After the room temperature, place the centrifuge tube in the magnetic frame. After the magnetic frame, suck the solution into the new centrifuge tube along the tube wall with a pipette, with attention not to absorb the magnetic bead. The resulting solution is the purified DNA sample and stored in-20°C.

#### Note:

- 1. The magnetic beads before use with a scroll oscillator.
- 2. The magnetic beads were stored in a 4°C refrigerator.
- 3. Do not freeze the magnetic beads and leave them in a dry state.
- 4. Samples should avoid repeated freezing and thawing, otherwise causing a decrease in extraction volume.