Magnetic Beads (DNA)

Cat. #: P920-1 (1 mL); P920-5 (5 mL); P920-30 (30 mL); P920-60 (60 mL); P920-450 (450 mL)

Storage: 4°C (**Do not freeze, keep sterile**)

Shelf Life: 12 months

Product Description:

For DNAs (dsDNA or ssDNA, ≥ 100base) purification in NGS library preparation, microarray sample preparation, PCR products purification, Sanger sequencing, gene cloning, and many other procedures with DNA purifications. This product is for research use only.

* Additional magnetic racks for tubes or plates are required.

Protocol

Important note: Precipitates during storage is normal. Before each use, mix well by shaking, thoroughly pipetting or vortexing to homogenous solution. No precipitate should be seen at the tube bottom. Well mixing is critical for high yield of DNA purification.

Magnetic Beads Prepare

1. Before each use, shake the beads bottle well to homogenous solution. Transfer needed volume of the Magnetic Beads solution to a fresh tube, and **warm it up** at room temperature for 15 minutes.

Add Magnetic Beads to DNA sample

2. Vortex thoroughly again to mix well. In one 1.5ml Eppendorf tube or 96-well plate, add **1.8 volume** of beads solution to 1 volume of DNA sample solution, mix the sample/bead mixture by gently pipetting for 15 times or vortexing for 2 minutes.

   Note: for best result, prepare DNA concentration at **10 ng/uL ~ 500 ng/uL**, and in **10 uL ~ 100 uL** volume.

Incubate at room temperature

3. Let the mixture stand at **room temperature** for **5 minutes**. Briefly spin-down the mixture in microcentrifuge, and load it to a **magnetic rack** (e.g., Life Technologies MagnaRack Cat. No. CS15000 or Magnetic Stand-96 Cat. No. AM10027).

Removal of the Buffer

4. Let the mixture stand at **room temperature** for **3 minutes**. The solution will become clear after the **integrated sample/bead unites** are collected at the tube wall.

5. Remove the liquid phase from the tube without disturbing the integrated sample/bead unites on the tube wall.

Wash

6. Keep the tube on the magnetic rack, add **500uL fresh 70% ethanol/isopropanol** to the pellet and wash for 30 seconds (If the wash within a tube, turn the tube around for 180^{o} on the magnetic rack for better wash.).

7. Remove the liquid with a pipette.

8. Repeat steps 6 and 7 once.

9. Spin the tubes or plates at **12,000 rpm** for **20 seconds** and reload to the magnetic rack for **10 seconds.**

10. Use a 10uL pipetting tips to remove the leftover liquid inside the tube as complete as possible, without disturbing the integrated sample/bead unites

Air Dry

11. Let the tube cap / plate cap open for **5 minutes** to air dry.

Elution

12. Add 20 ul ~ 40 uL TE or ddH_2O to the pellet and pipet to mix well. Incubate at room temperature for 2 minutes.

13. **Briefly spin** the tube / plate, and reload it back to the **magnetic rack** for **2 minutes**.

14. Transfer the supernatant (eluted DNA) to a new Eppendorf tube or plate.

15. The purified sample is ready for use, or store at 4^{o}C for short term or -20^{o}C for long term.

-- The end --