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5. Keep the centrifuge tube fixed on the magnetic rack, discard the solution completely, avoiding touching the magbeads.
6. Keep the centrifuge tube fixed on the magnetic rack, and add 250 μL of freshly prepared 80% ethanol to the centrifuge tube.
7. Keep the centrifuge tube fixed on the magnetic rack and completely discard the ethanol after the suspended magbeads are completely absorbed.
8. Repeat steps 6-7 twice.
9. Keep the centrifuge tube fixed on the magnetic rack for 10 min to allow the ethanol to completely evaporate.
10. Remove the centrifuge tube from the magnetic rack, add 20-100 μL EB (self-prepared) or ddH_2O, vortex to completely resuspend the magbeads in the eluent, and leave it at room temperature for 5 min.
11. Place the centrifuge tube on the magnetic rack until the magbeads are completely adsorbed (it takes about 5 min).
12. Transfer the eluate to a new 1.5 mL centrifuge tube. At this point, the magbeads can be discarded.

Calculation of purification and recovery rate

We suggest that the recovery rate of the samples before and after purification by agarose electrophoresis should be calculated. We do not recommend using the light absorption value at 260 nm to calculate the recovery rate. Because single-stranded and double-stranded DNA and dNTP and some impurities before purification in the solution all have light absorption at 260 nm, a false and false high DNA concentration will be obtained when calculating the concentration of DNA in the sample before recovery.

This product is for scientific research only, which shall not be used for clinical diagnosis or other purposes.

Magbead DNA Purification Kit (for NGS Size Selection)

Cat. No. : CW2508S (5 mL)
CW2508M (50 mL)

Storage Condition: The kit should be stored at 2-8℃, and transported at room temperature.

Components

Component	CW2508S 5 mL	CW2508M 50 mL
CMPure	5 mL	50 mL

Introduction

This kit provides a simple, fast and efficient nucleic acid purification method. This product can be used for selective or non-selective recovery of DNA during library construction for next-generation sequencing, as well as purification and recovery of PCR products. After CMPure is mixed with the sample in a certain ratio, the magbeads selectively adsorb the nucleic acid. After two steps of rinsing, the eluted DNA has high purity. The A260/A280 ratio is between 1.7-1.9, and the A260/A230 ratio is usually above 2.0. The DNA purified by this kit is suitable for PCR, Real-Time PCR, sequencing, southern blotting and other experiments.

About this kit

Sample type	Typical yield	Sample type	Typical yield
5000 bp segment	Up to 90%	1000 bp segment	Up to 90%
500 bp segment	Up to 80%	200 bp segment	Up to 70%

Reagents and Equipment to be Supplied by user

1. Magnetic rack——It is recommended DynaMag™-2 (Cat. No. 12321D).
2. 80% ethanol.
3. Eluent: Buffer EB (10 mM Tris-HCl, pH 8.0), ddH_2O (pH 7.0-8.0).

Precautions

1. Freezing, centrifugation, and ultrasound will cause irreversible damage to the magbeads in CMPure.
2. The magbeads in CMPure will gather into clusters after long-term placement, thereby reducing the surface area of the magbeads and reducing the sample recovery rate. The magbeads must be thoroughly mixed before use.
3. Before use, it is recommended to vortex and mix CMPure before dispensing it into 1.5 mL centrifuge tubes. Dispense 1 mL CMPure into each tube.
4. This kit is not suitable for the purification and recovery of DNA fragments less than 100 bp. If you want to recover DNA fragments less than 100 bp, it is recommended to increase the amount of CMPure to 4 times the sample volume.
5. When performing selective recovery of DNA, CMPure is more sensitive to the ion concentration in the DNA solution. The ion concentrations in the DNA solutions after adapter ligation and PCR amplification products obtained from second-generation sequencing library construction kits from different manufacturers are different, so when using CMPure for selective recovery of DNA, the reagent volume used is different.

Protocol

1. Vortex CMPure for 20 s to mix thoroughly into a homogeneous solution.
2. Add the purified DNA solution to the 1.5 mL centrifuge tube.
3. Add 2 times the sample volume of CMPure to the centrifuge tube in the previous step, vortex for 5 s and let stand at room temperature for 5 min.
4. Place the centrifuge tube from the previous step on the magnetic rack until the magbeads are completely adsorbed (about 5 min).