【Interpretation of test results】

1. No DNA fragments are extracted

If you find that there is no DNA fragment in Elution Buffer, please check whether ethanol is added to the Wash Buffer according to the label of the Wash Buffer bottle;

2. Problems with absorbance measurement results

The absorbance measures the relative absorbance between the unknown sample and the zero adjustment standards so dilute and zero the measured sample with the same liquid as the Elution Buffer.

3. How to calculate the extraction rate

1) Since the previous sample often contains non-target DNA fragments, primers, dNTPs, etc., it is impossible to calculate the recovery rate by measuring the absorbance before and after the sample is recovered.

2) The DNA fragments before and after recovery can be electrophoreted together. After taking photos with the gel imaging system, use the matching software to compare the gray scale of the electrophoresis band.

3) Note that electrophoresis conditions and shooting conditions will have a great impact on the gray-scale contrast results; please operate carefully to reduce errors.

【Limitations of the test method】

No more than 100μl PCR reaction product or other enzymatic reaction products.

【Product performance index】

Extraction product detection (OD260-OD320)/(OD280-OD320) ratio:1.8-2.0。

【Notes】

The following procedures are suitable for use with the Bioer NPA-32P nucleic acid purification instrument. If other nucleic acid purification instruments are used, the operating procedures need to be adjusted according to the performance of different instruments.

【Company Information】

Manufacturer: Hangzhou Bioer Technology Co.,Ltd

Address: No.1192 Bin'An Rd, Binjiang District, Hangzhou, Zhejiang Province, China

Tel: 0571-87774567 Fax: 0571-87774553

Web: www.bioer.com.cn

Zip Code: 310053

Aftersales Service Provider: Hangzhou Bioer Technology Co.,Ltd

MagaBio PCR Purification Kit

【Product Name】MagaBio PCR Purification Kit

【Packing Size】 32T；50T；100T

【Usage】It is suitable for extracting and purifying high-quality DNA from PCR reaction products and other enzymatic reaction products.

【Principle】

This kit uses a special buffer system and magnetic beads to extract and purify high-quality DNA from PCR reaction products and other enzymatic reactions.

Under the action of the binding solution, the DNA is specifically bound to the magnetic beads, and the magnetic beads particles that bind the DNA are captured by the magnetic material. The contaminants are removed through two washing processes. Finally, the DNA is eluted and collected from the magnetic beads under the action of Elution Buffer. Purified DNA using this kit can be applied to various downstream molecular biology experiments such as cloning, sequencing, restriction enzyme digestion and PCR/Real-time PCR.

【Main Components】

Cat	**BSC42S1E**	**BSC42S1**	**BSC42M1**
Component	**32T**	**50T**	**100T**
Binding Buffer	96-well pre-packed plate 2 pieces	10mL	20mL
Wash Buffer		6mL×3 (***Add 24mL of absolute ethanol before use***)	12mL×3 (***Add 48mL of absolute ethanol before use***)
Elution Buffer		10mL	20mL
MagaBio Reagent		0.5mL	1.0mL
Manual	1	1	1

【Reagents to be prepared by the user】

Absolute ethanol (For BSC42S1 and BSC42M1)

【Storage and Shelf life】

- ◆ This kit is stored at 2～8℃, all reagents can be stored stably for 18 months.
- ◆ This kit can be transported at room temperature.

【Applicable instrument】

1. Bioer NPA-32P purification instrument
2. Magnetic separation rack

【Sample requirements】

DNA fragment length≥60bp。

【Protocol】

1. Add 20-100μl PCR reaction product or other enzymatic reaction products into a 1.5ml centrifuge tube.
2. Add 200μl Binding Buffer and 10μl MagaBio Reagent.
3. The centrifuge tube was gently mixed upside down and placed at room temperature for 10min. Note: Mix upside down every 2-3 minutes.
4. Use the magnetic rack to precipitate the DNA-bound magnetic beads, discard the supernatant, and remove the centrifuge tube from the magnetic rack.
5. Add 750μL Wash Buffer to the centrifuge tube and invert the centrifuge tube several times to ensure that the magnetic beads are completely dispersed. Use a magnetic rack to precipitate the DNA-bound magnetic beads and discard the supernatant.
6. Remove the centrifuge tube from the magnetic rack and wash it again according to the above steps.
7. Open the centrifuge tube cover to dry for 5 minutes at room temperature.
8. Add 50μL Elution Buffer and gently mix centrifuge tube, and incubate at 60℃ for 5 minutes. Note: Mix gently every 2-3 minutes.
9. Use the magnetic rack to precipitate the magnetic beads, carefully transfer the supernatant containing the separated DNA to a new centrifuge tube, and store DAN at -20 ℃.

【The automation purification】Take Bioer NPA-32P as an example：

1. Reagents Preparation

A. For BSC42S1 and BSC42M1.

Add 200μL Binding Buffer to the 2.2mL 96-deep well plate column 1 and 7. Add 750μL Wash Buffer to column 2, 3, 8 and 9. Add 50μL Elution Buffer to column 5 and 11. Add 190μL Pure Water and 10μL MagaBio Reagent to column 6 and 12.

B. For BSC42S1E

Turn the 96-well plate upside down three times after placed at room temperature, then rip off plastic film, centrifuge in 96-well centrifuge for seconds (or swing by hand) to avoid adhered liquid. Rip off aluminum foil film of 96-well plate; make sure the direction of the plate (magnetic beads in column 6th&12th).

2. Add 20-100μl PCR reaction product or other enzymatic reaction products to the 96-deep well plate column 1 and 7.

3. Place 96-deep-well plate into the NPA-32P, and then plug in 8-strip Tip.

4. Run the program as follows.

Step	Well	Name	Waiting Time (min: ss)	Mixing Time (min: ss)	Magnet Time (min: ss)	Adsorption	Speed	Volume (μL)
1	1	Lysis	0 : 0	0 : 15	0 : 0	Normal	Fast	250
2	6	Beads	0 : 0	0 : 15	0 : 30	Normal	Fast	200
3	1	Binding	0 : 0	3 : 0	0 : 45	Strong	Slow	250
4	2	Wash 1	0 : 0	2 : 0	0 : 30	Strong	Fast	750
5	3	Wash 2	0 : 0	1 : 0	0 : 30	Strong	Fast	750
6	5	Elution	1 : 0	3 : 0	0 : 30	Strong	Slow	50
7	6	Discard	0 : 0	0 : 30	0 : 0	Normal	Fast	200

Heating setting：

Elution temperature: 60 ℃, Elution start heating step: 6.

5. When the program finished, transfer the Elution Buffer of column 5, 11 into nuclease-free tubes. If not used immediately, please store DNA at -20℃