



PRODUCT INFORMATION

EZ-10 SPIN COLUMN PCR* PRODUCTS PURIFICATION KIT

Components	BS363 , 50 Preps	BS364 , 100 Preps
Binding Buffer I	20ml	2x20ml
Wash Solution ^(A)	12ml	24ml
Elution Buffer ^(B)	5ml	10ml
EZ-10 Column	50	100
2.0 ml Collection Tube	50	100

(A) Before use, add 48ml of 96-100% of ethanol to 12ml Wash Solution for BS363, or add 96ml of 96-100% ethanol to 24ml Wash Solution for BS364. For other volumes of wash solution, simply add enough ethanol to make a 4:1 ratio (volume of added ethanol: volume of Wash Solution = 4:1).

(B) Elution Buffer is 2mM Tris-HCl pH 8.0~8.5. Although TE buffer pH 8.0 or water may be substituted, the resulting yields may be up to 20% lower.

Storage: The kit is stable for 12 months at room temperature. For longer storage, keep all contents cold.

Principle:

EZ-10 spin column purification kits utilize a silica-gel membrane that selectively absorbs up to 10ug of DNA fragments in the presence of specialized binding buffers. Nucleotides, oligos (<40-mer), enzymes, mineral oil and other impurities do not bind to the membrane and are washed away. The DNA fragments can then be eluted off the column in small volume and used in downstream applications without further processing.

Application:

- Recovery of PCR* products from PCR* reaction mixture.
- Recovery of DNA fragments from reaction solutions.

Features:

- Quick and economical. The entire procedure takes 15-20 minutes.
- High yields (60-90%) of 60bp-40kb DNA fragments.
- Efficient removal of contaminants. Purified DNA can be used in any downstream application such as sequencing, labeling, restriction enzymatic digestion, ligation or transformation.
- No phenol / chloroform extraction or ethanol precipitation is required.

Protocol for Purification of PCR* Products:

1. Transfer PCR* reaction mixture to a 1.5ml microfuge tube and add 3 volumes of Binding Buffer I.
2. Transfer the above mixture solution to the EZ-10 column and let stand at room temperature for 2 minutes. Centrifuge at 5000 rpm for 1 minute.
3. Remove the flow-through in the tube. Add 500ul of Wash Solution to the column and centrifuge at 8,000 rpm for 1 minute.
4. Repeat washing procedure in step 3. Spin at 8,000 rpm for an additional minute to remove any residual Wash Solution.



PRODUCT INFORMATION

5. Transfer the column into a clean 1.5ml microfuge tube and add 30-50ul of Elution Buffer. Incubate at room temperature for 2 minutes. Centrifuge at 10,000 rpm for an additional 2 minutes to elute the DNA.

Note: It is extremely important to add the Elution Buffer to the center of the column. Incubating the column at higher temperatures (37° to 50°C) may slightly increase the yield. Pre-warming the Elution Buffer at 55° to 80°C may also slightly increase elution efficiency.

If a higher DNA concentration is desirable, 20ul (or less) of elution buffer can be used to elute the DNA. It is critical that the elution buffer be applied directly in the center of the column. (To recover maximum amount of DNA it is recommended to repeat the elution step.).

6. Store the purified DNA at -20°C.

Note:

1. If PCR* reaction mixture contains seriously non-specific amplified DNA fragments, use of the DNA Gel Extraction Kit is recommended.
2. This kit can not remove the template and primers with chain length longer than 50-mer.

* The Polymerase Chain Reaction (PCR*) is covered by patents owned by Hoffman-La Roche Inc.