

IDPURE™ Spin Column PCR Products Purification Kit

IDBB2030 50 Reactions

Kit Contents

Components	50 Reactions
Binding Buffer 1	20 ml
Wash Solution	12 ml
Elution Buffer	5 ml
Spin Columns	50
Collection Tubes	50

(A) Before use, add 48 ml of 96-100% ethanol to 12 ml Wash Solution.

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 2 mM 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 of the kit cold.

Principle:

The Spin column purification kit utilizes silica-gel based membrane which adsorbs selectively up to 10 µg 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. DNA fragments can be eluted off the column in a small volume and user in downstream applications without further processing.

Application:

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

Features:

- Rapid and Economical. Entire procedure takes 15-20 minutes.
- High yields (60-90%). It is suitable to recover 60 bp-40 kb DNA fragments.
- Efficient removal of contaminants. Purified DNA can be used in any downstream applications such as sequencing, labeling, restriction enzymatic digestions, ligations or transformations.
- No phenol / chloroform extraction or ethanol precipitation.

Procedure for Purification of PCR Products:

1. Transfer PCR reaction mixture to a 1.5 ml microfuge tube and add 3 volumes of Binding Solution I.
2. Place a Spin Column into a 2.0 ml collection tube. Transfer the above mixture solution to the Spin Column, and let the column stand at room temperature for 2 minutes. Spin at 10,000 rpm for 2 minutes.
3. Remove the flow-through in the tube. Add 500 µl of Wash Solution to the column and spin at 10,000 rpm for 2 minutes.
4. Repeat washing procedure in step 3. Spin at 10,000 rpm for an **additional** minute to remove residual amount of Wash Solution.
5. Transfer the column in a new clean 1.5 ml microfuge tube. Add 30-50 µl of Elution Buffer and incubate at room temperature for 2 minutes. Spin 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, (37-50°C) may slightly increase the yield. Prewarming the Elution Buffer at 55-80 °C may also slightly increase elution efficiency.

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

6. Store the purified DNA at -20°C.

Notes:

If reaction mixture contains seriously non-specific amplified DNA fragments, use of DNA Gel Extraction Kit (Cat# IDBB2029) is recommended.

This kit cannot remove the template and primers with chain length longer than 50-mer.

Use of IDPURE™ Spin Column PCR Products Purification Kit does not guarantee the successful outcome of any molecular analysis.