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PureLink® PCR Purification Kit

Catalog numbers K3100-01 and K3100-02

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Purifying PCR Products

Prepare Buffers

Buffer	Used for	Cat. no. K3100-01	Cat. no. K3100-02
Binding Buffer (B2)	purifying 100 bp to 12 kb dsDNA PCR fragments	Add 10 mL isopropanol	Add 48 mL isopropanol
Binding Buffer HC (B3)	removing primer dimers or short spurious PCR products (<300 bp)	Add 2.3 mL isopropanol	Add 11 mL isopropanol
Wash Buffer (W1)	all procedures	Add 64 mL ethanol	Add 320 mL ethanol

Procedure for Purifying PCR Products

1. **Combine.** Add 4 volumes of Binding Buffer B2 or B3 with isopropanol (see preceding table) to 1 volume of a PCR sample (50–100 µL). Mix well.

2. **Load.** Pipet the sample into a PureLink® Spin Column in a Collection Tube. Centrifuge the column at >10,000 × *g* for 1 minute. Discard the flow-through.

3. **Wash.** Re-insert the column into the Collection Tube and add 650 µL Wash Buffer (W1) with ethanol. Centrifuge the column at >10,000 × *g* for 1 minute. Discard the flow-through and place the column in the same Collection Tube. Centrifuge the column at maximum speed for 2–3 minutes.

4. **Elute.** Place the column into a clean 1.7-mL Elution Tube (supplied with the kit). Add 50 µL Elution Buffer to the center of the column. Incubate the column at room temperature for 1 minute. Centrifuge the column at maximum speed for 2 minutes. *The elution tube contains the purified PCR product.* Store the purified DNA at 4°C for immediate use or at –20°C for long-term storage.

Intended Use

For research use only. Not intended for any animal or human therapeutic or diagnostic use.

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Troubleshooting

Problem	Solution
Low DNA yield	• Check the amplicon on a gel to verify the PCR product prior to purification. • Always mix 1 volume of PCR (50–100 µL) with 4 volumes of Binding Buffer (B2 or B3). • Be sure to add 100% isopropanol to the Binding Buffers (B2 and B3). • Be sure to add 96–100% ethanol to Wash Buffer (W1). • Add Elution Buffer to the center of the column. Incubate the tube with Elution Buffer for 1 minute before centrifugation.
Primer dimers are present	To efficiently remove primer dimers or short, spurious PCR products (<300 bp), use Binding Buffer B3. Binding Buffer B3 is specifically designed to remove <300 bp DNA fragments, eliminating the need for gel purification.
Enzymatic reactions are inhibited	To remove Wash Buffer, discard Wash Buffer flow-through from the Wash Tube. Place the column into the Wash Tube and centrifuge the column at >12,000 × *g* for 2–3 minutes to completely dry the column.

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