Product Information Sheet and Protocol

Product Name: PCR Purification Kit*
Item No.:

Item Number	Preparations
SS-PPK-10	10
PPK-50	50
PPK-250	250

Storage and Handling:
Store at room temperature upon arrival.

Product Description:
Empirical Bioscience PCR Purification Kit is designed for the clean-up of PCR reactions by removal of primer dimers, primers, nucleotides, proteins, salt, agarose, ethidium bromide, and other impurities. The preparation is based on a silica-membrane technology for binding DNA in high-salt and elution in low-salt buffer. The kit provides a simple and efficient way to purify linear or circular DNA in the size range from 100 bp to 10 kb and is optimized for working with DNA amounts of up to 20 µg. The preparation requires no organic extractions or precipitation and guarantees high and stable recovery rates.

Kit contents:
Binding Buffer, Activation Buffer, Washing Buffer (add 96-99% Ethanol as indicated), Elution Buffer, Spin Columns and 2 ml Collection Tubes.

Additional Materials not provided:
96-99% Ethanol
Isopropanol (for high yield preparation)
1.5 ml microtubes

Preparation Procedure:
The DNA purification follows a simple binding, washing and eluting procedure. Before starting, add 96-99% Ethanol to the Washing Buffer as indicated on the bottle. The additional use of Isopropanol is recommended for fragments smaller than 200 bp or larger than 5 kb.

Buffer	SS-PPK-10	PPK-50	PPK-250
Binding Buffer	6mL	30mL	150mL
Activation Buffer	1.2mL	6mL	30mL
Washing Buffer	Add 12mL Ethanol (15mL final Volume)	Add 64mL Ethanol (80mL final Volume)	Add 160mL Ethanol (200mL final Volume)
Elution Buffer	1mL	5mL	25mL

Protocol

Standard Sample Preparation:

For DNA fragment sizes in the range of 200 bp and 5 kb:

- Add 5 volumes of Binding Buffer to 1 volume of PCR sample and mix well.

High Yield Sample Preparation:

For DNA fragment sizes smaller than 200 bp or larger than 5 kb:

- Add 3 volumes Binding Buffer and 2 volumes of Isopropanol to 1 volume of PCR sample.

Column Activation:

- Place a Spin Column into a 2 ml Collection Tube.
- Add 100 µl of Activation Buffer into the Spin Column.
- Centrifuge at 10,000 g for 30 sec in a micro-centrifuge.

Column Loading:

- Apply the sample mixture from sample preparation into the activated Spin Column.
- Centrifuge at 10,000 g for 30 sec in a micro-centrifuge.
- Discard the flow-through.

Column Washing:

- Place the DNA loaded Spin Column into the used 2 ml tube.
- Apply 700 µl of Washing Buffer to the Spin Column.
- Centrifuge at 10,000 g for 30 sec and discard the flow-through.

Optional Secondary Washing: Recommended only for DNA >200 bp, if highly purified DNA (for DNA sequencing, transfection, etc.) is required.

- Add 700 µl of Washing Buffer to the Spin Column.
- Centrifuge at 10,000 g for 30 sec and discard the flow-through.

- Centrifuge again for 2 min to remove residual Washing Buffer.

Elution:

- Place the Spin Column into a clean 1.5 ml microtube (not provided).
- Add 30-50 µl Elution Buffer or dd-water to the center of the column membrane.
- Incubate at room temperature for 1 min.
- Centrifuge at 10,000 g for 1 min to elute DNA.