NANOHELIX
Reliable Partner for DNA Technologies

Ver. 2104-01

PureHelix™ *PCR* Purification Kit

Kit contents

PureHelix™ *PCR* Purification Kit		
Cat. No.	**PCR50**	**PCR200**
Buffer PCRB	30 ml	60 ml x 2ea
Buffer EB	5 ml	20 ml
Buffer WB	15 ml **(Add 60 ml ethanol)**	40 ml **(Add 160 ml ethanol)**
Column Set (with cap) 50ea/**Blue Box**	1 box	4 box
MaxBinder™ solution	5 ml	20 ml
Certificate Analysis	1 ea	1 ea

Description

PureHelix™ *PCR* Purification Kit is designed for rapid and high-yield clean-up DNA from PCR and other enzymatic reaction mixtures. **PureHelix™ *PCR* Purification Kit** contains a silica membrane assembly for binding of DNA in high-salt buffer and elution with low-salt buffer or water. The purification procedure removes primers, nucleotides, proteins, salts and other impurities from DNA samples. The high purity DNA isolated using this kit is adequate for any molecular biology applications. Especially, the purification of PCR products using the Dimer Removal condition for an efficient removal of primer dimers, by-products of PCR, ensures excellent results of the automating sequence analysis.

Applications

PCR
Restriction digestion
Ligation and transformation
Automatic fluorescent sequencing

Store : Ambient temperature

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Quality Control Assay

Functional Analysis

PureHelix™ *PCR* Purification Kit was tested for the efficiency of purification for various sized PCR products (0.1, 1, 5, or 10 kb) under the high-yield or dimer-removal condition in comparison with the PCR product before purification.

Quality authorized by Yountaek Go 

Protocol

Important things to do before starting

- Prepare the **Isopropanol** (2-propanol) **(not provided in this kit).**
- Before using **Buffer WB**, add **absolute ethanol** according to the bottle label to obtain a working solution. You may use 80% ethanol, instead of Buffer WB**.**

1. Sample Preparation

1) Add **3 volumes** of **Buffer PCRB** and **2 volumes** of **isopropanol** to the PCR sample. For example, if the volume of your PCR sample is 50 µl, add 150 µl of Buffer PCRB and 100 µl of isopropanol.
   ※ For DNA fragment sizes in the range of 200 bp to 5 kb, and you want to remove the primer dimer : Add 5 volumes of Buffer PCRB to 1 volume of PCR sample and mix well. For example, if the volume of your PCR sample is 50 µl, add 250 µl Buffer PCRB.

2. Column Activation

1) Place a Spin Column into a 2 ml collection tube.
2) Add **100 µl** of **MaxBinder™ Solution** into the Spin Column
3) Centrifuge at 12,000 rpm for 30 sec and immediately proceed to Step 3.
   You need not discard the flow-through from the collection tube.
   ※ These steps are required for the best yield.

3. Column Loading

1) Apply the sample mixture from step 1 into the activated Spin Column.
2) Centrifuge at 12,000 rpm for 30 sec in a microcentrifuge.
3) Discard the flow-through. Place the Spin Column into a 2 ml collection tube again.

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4. Column Washing

1) Apply **750 µl** of **Buffer WB (80% ethanol)** to the Spin Column. Centrifuge at 12,000 rpm for 30 sec and discard the flow-through.
   ※ Repeat this step for high-purity DNA preparation.
2) Centrifuge again for 2 min to remove residual ethanol.
   ※ Buffer WB which is kept long time makes to decrease the concentration of ethanol and it could drop DNA yield finally.

5. Elution

1) Place the Spin Column into a clean 1.5 ml microcentrifuge tube (not provided).
2) Add **30 ~ 50 µl** of **Buffer EB** or distilled water to center of the column membrane and incubate for 1 min at room temperature.
3) Centrifuge at 12,000 rpm for 1 min to elute DNA.

Products

Cat. No.	Products	Size
PCR50	PureHelix™ *PCR* Purification Kit	50 preps
PCR200	PureHelix™ *PCR* Purification Kit	200 preps

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