

F711-1(Rev.0)

PureHelix[™] Gel Extraction Kit

Kit contents

PureHelix [™] <i>Gel Extraction</i> Kit			
Cat. No.	GE50 (50preps)	GE200 (200preps)	
GEB	75ml	100ml x 3ea	
EB	5ml	20ml	
WB	15ml (Add 60ml ethanol)	40ml (Add 160ml ethanol)	
MaxBinder [™] Solution	5ml	20ml	
Column set (with cap) 50ea/Blue Box	1box	4box	
Instructions for Use	1ea	1ea	

Description

PureHelix[™] *Gel* Extraction Kit is designed for rapid, high-yield and high-quality isolation of any type of DNA, such as Plasmid, PCR product, digested DNA etc. from agarose gel. **PureHelix[™]** *Gel* Extraction 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 agarose, ethidium bromide and other impurities from DNA samples.

Applications

Automatic fluorescent sequencing Restriction digestion Ligation and transformation



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Quality Control

Each lot of **PureHelix™** *Gel* **Extraction Kit** was tested against predetermined specifications to ensure consistent product quality.

Protocol

Important things to do before starting

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

1. Excise the Gel

- 1) Cut the area of gel containing the DNA fragment using the gel gutting apparatus.
- 2) Transfer the excised gel to a clean 1.5 ml tube and weigh the gel slice.

2. Dissolve the Gel

- 1) Add **3 volumes of GEB (v/w)** to 1 volume of the sliced gel.
 - \times $\,$ For example, add 300 μl of GEB to each 100mg (approx. 100 $\mu l)$ gel.
 - ***** For gels of higher concentration than 2.5% agarose, add 6 volumes of GEB per gel volume.
- 2) Incubate at 60°C for 10-20 min with occasional mixing to ensure gel dissolution.
- 3) Add 1 volume of **Isopropanol** per gel volume to the dissolved gel and mix well.

3. Column Activation

- 1) Place a **Spin Column** into a **2 ml collection tube.**
- 2) Add 100 µl of MaxBinder[™] Solution into the Spin Column.
- Centrifuge at 12,000 rpm for 30 sec and immediately proceed to Step 4.
 You need not discard the flow-through from the collection tube.
 - \times $\,$ These steps are required for the best yield.

4. Column Loading

- 1) Apply the sample mixture from step 2 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.



Gel Extraction Kit

5. Column Washing

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

6. Elution

- 1) Place the Spin Column into a clean 1.5 ml microcentrifuge tube (not provided).
- 2) Add **30** ~ **50 μl of 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
GE50	PureHelix [™] <i>Gel</i> Extraction Kit	50preps
GE200	PureHelix [™] <i>Gel</i> Extraction Kit	200preps