

# ISOLATE II PCR and Gel Kit

A Precious Find

- **Fast:** streamlined protocol for simple recovery of PCR products in 10 minutes and DNA from gel slices in 20 minutes
- **Efficient:** column matrix developed for recovery rates of between 70% and 95%
- **High-performance:** extraction of consistently high-quality DNA fragments, ideal for use in all downstream applications
- **Versatile:** single buffer promotes effective DNA recovery from both TAE and TBE agarose gels
- **Safe:** no hazardous phenol/chloroform extraction

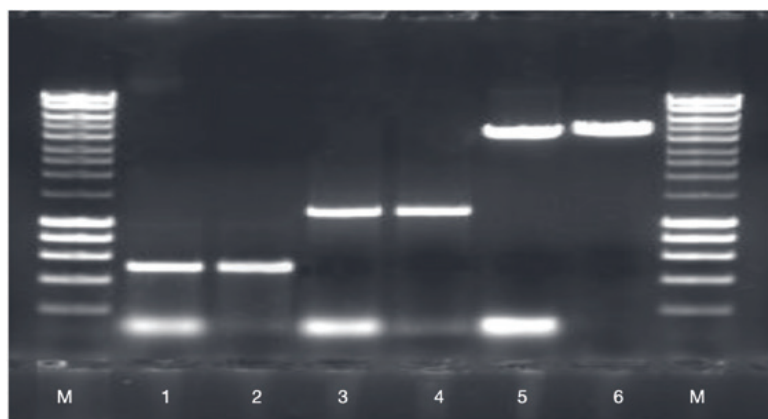
## ISOLATE II PCR and Gel Kit provides a simple, efficient membrane-based method for the purification of DNA from PCR reactions and from TAE & TBE agarose gels, without the need for hazardous reagents or ethanol precipitation.

ISOLATE II PCR and Gel Kit is the simplest option for the purification of PCR products (Fig. 1) and for the isolation of DNA fragments from TAE and TBE agarose gel slices (Fig. 2). A fast and easy-to-follow protocol is given for each application.

PCR products can be purified in 10 minutes using simple binding and elution steps. Concentrated PCR products ranging between 60 bp and 15 kb can be eluted, removing primers, nucleotides, enzymes, mineral oil, salts and other impurities.

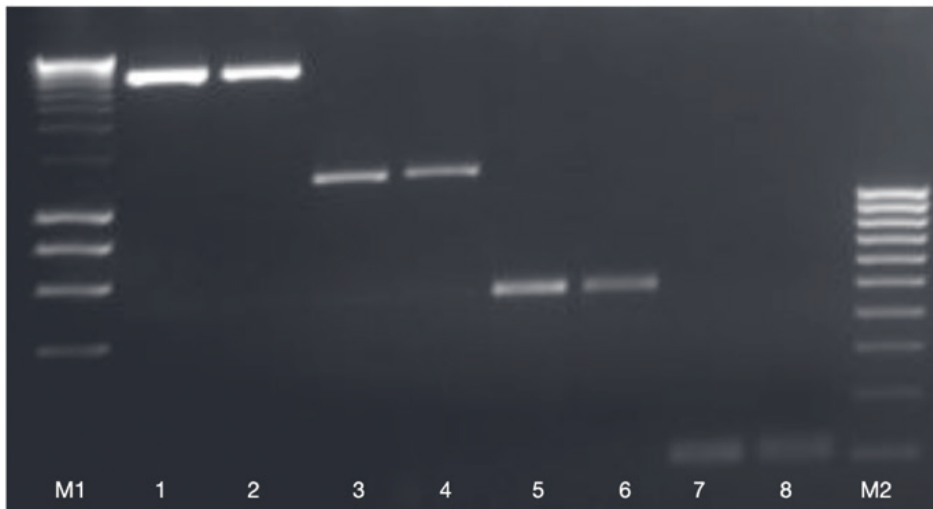
DNA fragments between 50 bp and 20 kb can be extracted from agarose gel slices in 20 minutes using a color indicator to help maintain optimal pH and identify undissolved agarose.

ISOLATE II PCR and Gel Kit has been designed to deliver optimal performance in downstream applications, including transformations, cloning, sequencing and restriction analysis.



**Fig. 1 PCR product purification**

PCR was performed to amplify a 500 bp, 1 kb and 5 kb amplicon. The PCR products were split and half were purified with ISOLATE II PCR and Gel Kit. The unpurified PCR products (lanes 1, 3 and 5) and purified PCR products (lanes 2, 4 and 6, including HyperLadder 1kb (M)) were then run on a 1.5% TAE agarose gel. The results illustrate the efficiency of the ISOLATE II PCR and Gel Kit to efficiently remove primer-dimers present in the PCR reactions, without loss of the PCR product.



**Fig. 2 Recovery of DNA from agarose gel**

A 5 kb, 1.5 kb, 500 bp and 100 bp DNA fragment were run on a 1% TAE agarose gel and extracted using ISOLATE II PCR and Gel Kit. The isolated fragments were again run on a 1% TAE agarose gel (lanes 1, 3, 5 and 7) along with the original fragments (lanes 2, 4, 6 and 8) (HyperLadder 1 kb and 100 bp, M1 and M2 respectively). The results illustrate very high recovery rates of DNA fragments using the ISOLATE II PCR and Gel Kit.

## APPLICATIONS

The isolated DNA is of high purity ( $A_{260}/A_{280}$  ratio: 1.8 – 1.9) and is ready for use in various downstream applications:

- Cloning
- Ligation
- Restriction digestion
- Fluorescence sequencing
- Labeling
- PCR
- Transfection
- *In vitro* transcription

## Ordering Information

ISOLATE II PCR and Gel Kit	Pack Size	Cat. #
	10 Preps	BIO-52058
ISOLATE II PCR and Gel Kit	50 Preps	BIO-52059
	250 Preps	BIO-52060

For related products such as DNA ligase and competent cells please visit [www.bioline.com](http://www.bioline.com)

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