

Two in One - DNA Cleanup from agarose gels and PCR



PCR fragments of 300 bp were purified from Fig. 1: PCR tragments of 300 pp were purified from 40 µl of a rCx stock solution using reaccente Cety. PCR Extraction Kit and a competitor kit, according to manufacturers protocol. 5 µl of elucted DNA was analyzed on a 1,5% TAE agarose gel.

The figure demonstrates that the FastGene® Gel/PCR Extraction Kit shows up to 90% of DNA recovery.



Each kit includes 50µl Midori Green Advance DNA

extraction of DNA from agarose gels and for the purification of PCR products. DNA fragments purified with FastGene® Gel/PCR Extraction Kits are ready for direct downstream applications, common

Gel/PCR

designed

Extraction

the

for

sequencing, ligation and transformation, restriction digestion, microarray analysis, PCR and in vitro transcription.

FastGene®

are

Kits



Fig. 2: 10 μ l of a PCR stock solution with a 100 bp rig. 2: 10 µl of a PCR stock solution with a 100 bp amplicon were applied on a TBE agarose gel. After electrophoresis the DNA was purified using a competitor kit and the FastGene® Gel/PCR Extraction Kit, according to manufacturers protocol. DNA was eluted in 20 µl elution buffer and 10 µl of eluate was analyzed on a 2% TAE agarose gel.

The DNA recovery from agarose gels using FastGene® Gel/PCR Extraction Kits is very high even for small

Lane 1: Unpurified PCR fragment; M = Marker Lane 2,3 and 4: Supplier M Lane 5,6 and 7: FastGene® Gel/PCR Extraction Kit

PCR products : Buffer GP1 Sample preparation = 1 : 5 (e.g. 40µl : 200µl) Vortexing Load the sample onto the Load the sample onto the Sample loading column 13,000rpm; 30sec column 13,000rpm; 30sec 600µI of GP2 13,000rpm ; 30sec] * Membrane washing * For TBE gels this wash step should be repeated 13,000rpm; 2min Membrane drying

Fig. 3: Workflow of the Gel/PCR Extraction Kit

- 2 Applications 1 Kit no additional buffer needed
- Each Kit contains 5 Agarose Gel Band Cutter and 50 µl Midori Green Advance (Pages 42 - 43)

Specification

Parameter	Gel Extraction	PCR Clean-up	
Max. sample volume	300 mg agarose gel	100 µl PCR mix	
Gel	< 2,5% TAE or TBE		
Typical Recovery	70-80%	80-90%	
Binding capacity	10 µg	10 µg	
DNA fragment size	50 bp – 10 kbp	50 bp – 10 kbp	
Primer removal		< 25 bp	
Elution volume	20-50 µl	20-50 μΙ	
Prep time	20 minutes	20 minutes	

Ordering Information

Cat.No.	Product	Content
FG-91202	FastGene® Gel/PCR Extraction Kit	100 preps
FG-91302	FastGene® Gel/PCR Extraction Kit	300 preps
FG-803	FastGene® Agarose Gel Band Cutter	50 pieces