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The Beauty of Science is to Make Things Simple

INSTRUCTION MANUAL

ZR-96 Zymoclean™ Gel DNA Recovery Kit Catalog Nos. **D4021 & D4022**

Highlights

- Quick, large-scale (96-well plate) recovery of pure DNA from TAE/TBE-buffered agarose gels.
- The unique Zymo-Spin™ I-96 plate facilitates binding up to 5 µg DNA/well and elution with as little as 15 µl/well.
- Isolated DNA is ideal for DNA ligation, sequencing, DNA labeling, PCR, etc.

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Satisfaction of all Zymo Research products is guaranteed. If you are not satisfied with this product please call 1-888-882-9682.

Product Contents

ZR-96 Zymoclean™ Gel DNA Recovery Kit (Kit Size)	D4021 (2 x 96 preps.)	D4022 (4 x 96 preps.)	Storage Temperature
ADB Buffer	100 ml	2 x 100 ml	Room Temp.
DNA Wash Buffer*	24 ml	48 ml	Room Temp.
Zymo-Spin™ I-96 Plate	2 plates	4 plates	Room Temp.
Collection Plate	2 plates	4 plates	Room Temp.
Elution Plate	2 plates	4 plates	Room Temp.
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Note - Integrity of kit components is guaranteed for up to one year from date of purchase. Reagents are routinely tested on a lot-to-lot basis to ensure they provide maximal performance and reliability.

* Ethanol must be added prior to use as indicated on the DNA Wash Buffer label.

Specifications

- **Sample Sources** – DNA excised from TAE/TBE-buffered agarose gels.
- **DNA Purity** – High-quality, purified DNA is eluted with water and is especially well suited for ligation and sequencing reactions.
- **DNA Size Limits** – From 75 bp to 23 kb.
- **DNA Recovery** – Typically, up to 5 µg total DNA/well can be eluted with ≥ 15 µl water. For DNA 75 bp to 10 kb the recovery is 70-90%. For DNA 11 kb to 23 kb the recovery is 50-70%.
- **Product Detergent Tolerance** – ≤5% Triton X-100, ≤5% Tween-20, ≤5% Sarkosyl, ≤0.1% SDS.
- **Equipment** – microcentrifuge, vortex, centrifuge w/ microplate carriers

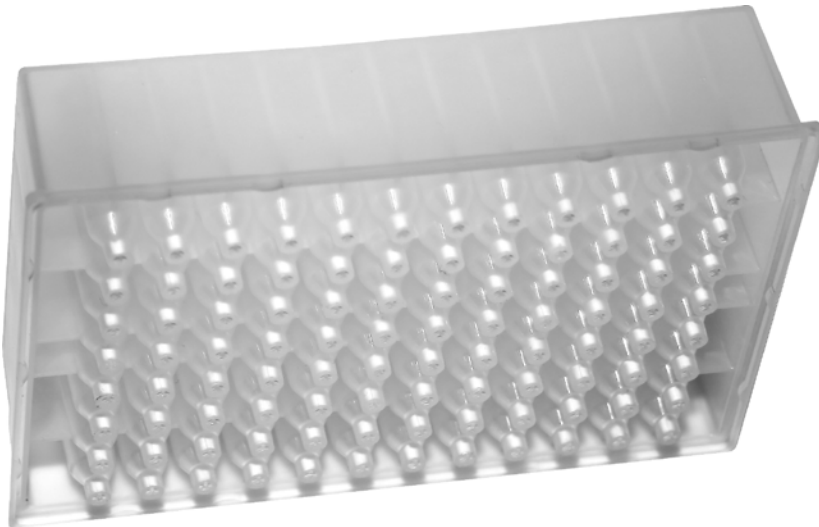
Note - ™ Trademarks of Zymo Research Corporation. This product is for research use only and should only be used by trained professionals. Some reagents included with this kit are irritants. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your research institution or facility.

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Product Description

Zymo Research's **ZR-96 Zymoclean™ Gel DNA Recovery Kit** provides a hassle-free method for rapid, large-scale (96-well plate) purification and concentration of high-quality DNA from agarose gels. Simply add the specially formulated **Agarose Dissolving Buffer (ADB) Buffer** to the gel slices containing DNA, let dissolve, and then transfer to the wells of the supplied **Zymo-Spin™ I-96 Plate**. There is no need for organic denaturants or chloroform. Instead, the product utilizes *Fast-Spin* technology to yield high-quality, purified DNA in just minutes. DNA purified using the **ZR-96 Zymoclean™ Gel DNA Recovery Kit** is well suited for DNA ligation, sequencing, DNA labeling, PCR, etc.

Zymo-Spin™ I-96 Plate



- Small Elution Volume ($\geq 15 \mu\text{l/well}$)
- No Liquid Retention
- Durable Construction

Alternatively, add 104 ml and 208 ml of 95% ethanol to the 24 ml and 48 ml sizes of the **DNA Wash Buffer** concentrate, respectively.

Do not incubate above 60°C. It is important that the gel slice dissolves completely. This can be facilitated by gentle mixing during the incubation.

Elution of DNA from the plate is dependent on pH and temperature. If water is used, make sure the pH is >5.0. Waiting 1 minute after adding water to the plate may improve the yield of larger (> 6 kb) DNA. For even larger DNA (> 10 kb) the total yield may be improved by eluting the DNA with 60-70°C water.

TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0) or modified TE (10 mM Tris, 0.1 mM EDTA, pH 8.5) can also be used for elution if required by your experiment.

For **Technical Assistance**, please contact 1-888-882-9682 or E-mail tech@zymoresearch.com.

REAGENT PREPARATION

Before starting, add 96 ml 100% ethanol to the 24 ml **DNA Wash Buffer** concentrate (192 ml 100% ethanol to the 48 ml **DNA Wash Buffer** concentrate) to obtain the final **DNA Wash Buffer** solution.

PROTOCOL

1. Excise the DNA fragment from an agarose gel using a razor blade or scalpel and transfer it into a well of the provided **Collection Plate**.

Note: The amount of agarose excised from the gel should be as small as possible and should not exceed 150 μ l (150 mg) per well.

2. (To each well containing a sample) Add 3 volumes of **ADB Buffer** to each volume of agarose excised from the gel.
3. Incubate at 37-55°C for 10-15 minutes until the gel slices are completely dissolved.
4. Transfer the melted agarose solutions to the wells of the **Zymo-Spin™ I-96 Plate** on the empty **Collection Plate** used in Step 1 (above).
5. Centrifuge at $\geq 3,000 \times g$ (5,000 $\times g$ max.) for 5 minutes until the sample mixtures have been completely filtered. Discard the flow-through in the **Collection Plate**.
6. Add 300 μ l **Wash Buffer** to each well of the **Zymo-Spin™ I-96 Plate**. Centrifuge at $\geq 3000 \times g$ for 5 minutes. Repeat wash step, but centrifuge for 15 minutes.
7. Add $\geq 15 \mu$ l water directly to the column matrix in each well. Transfer the **Zymo-Spin™ I-96 Plate** onto an **Elution Plate** and centrifuge at $\geq 3000 \times g$ for 3 minutes to elute the DNA.

Ultra-pure DNA in water is now ready for use.

Ordering Information

Product Description	Catalog No.	Kit Size
ZR-96 Zymoclean™ Gel DNA Recovery Kit	D4021	2 x 96 preps.
	D4022	4 x 96 preps.

For Individual Sale	Catalog No.	Amount
ADB Buffer	D4001-1-50	50 ml
	D4001-1-100	100 ml
DNA Wash Buffer (concentrate)	D4003-2-24	24 ml
	D4003-2-48	48 ml
Zymo-Spin™ I-96 Plate	C2004	2 plates
Collection Plate	C2002	2 plates
Elution Plate	C2003	2 plates

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Popular DNA Purification & Analysis Products from Zymo Research

Product	Description	Kit Size (Preps)	Catalog No. (column format)
DNA Clean & Concentrator-5™	Clean & concentrate DNA from any reaction or “crude” preparation in 2 minutes. A 6 µl minimum elution volume allows for highly concentrated DNA. Designed for samples containing up to 5 µg of DNA.	50	D4003 (uncapped)
		200	D4004 (uncapped)
		50	D4013 (capped)
		200	D4014 (capped)
DNA Clean & Concentrator-25™	Clean & concentrate DNA in minutes. 25 µl minimum elution volume allows for highly concentrated DNA. Designed for purifying up to 25 µg of DNA.	50	D4005 (uncapped)
		200	D4006 (uncapped)
		50	D4033 (capped)
		200	D4034 (capped)
DNA Clean & Concentrator-100™	Clean & concentrate DNA in minutes. 100 µl minimum elution volume allows for highly concentrated DNA. Designed for purifying up to 100 µg of DNA.	25	D4029
		50	D4030
DNA Clean & Concentrator-500™	Clean & concentrate DNA in minutes. 1 ml minimum elution volume allows for highly concentrated DNA. Designed for samples containing up to 500 µg of DNA.	10	D4031
		20	D4032
ZR-96 DNA Clean & Concentrator-5™	Quick (15 minute), high-output recovery of pure DNA from PCR, endonuclease digestions, plasmid preparations, etc. 10-15 µl minimum elution volume allows for highly concentrated DNA. Designed for samples containing up to 5 µg of DNA.	2x96	D4023
		4x96	D4024
Zymoclean™ Gel DNA Recovery Kit	Purify DNA from high and low-melting agarose gels in minutes	50	D4001
		200	D4002
ZR-96 Zymoclean™ Gel DNA Recovery Kit	High-throughput DNA purification from high and low-melting agarose gels.	2x96	D4021
		4x96	D4022
Pinpoint Slide DNA Isolation System™	Recover genomic DNA from paraffin-embedded or fresh tissue sections for PCR. Ideal for isolating DNA from clinical tissue samples.	50	D3001
Zyppy™ Plasmid Miniprep Kit	Pellet-Free™ plasmid DNA purification in minutes: (alkaline lysis/spin column format for low 30 µl elution volume).	50	D4036
		100	D4019
		400	D4020
Zyppy™ Plasmid Midiprep Kit	Pellet-Free™ plasmid DNA purification in minutes: (alkaline lysis/spin column format and 150 µl minimum elution volume).	25	D4025
		50	D4026
Zyppy™ Plasmid Maxiprep Kit	High-purity plasmid DNA purification in minutes: (alkaline lysis/spin column format and 2 ml minimum elution volume).	10	D4027
		20	D4028
ZR Genomic DNA I Kit™	Genomic DNA isolation from whole blood, tissue culture cells, solid tissue and liquid samples. (Silica bead format is scalable to fit your requirements).	100	D3004
		400	D3005
ZR Genomic DNA II Kit™	Genomic DNA purification from whole blood, tissue culture cells, solid tissue and liquid samples. No requirement for beads or phenol chloroform.	50	D3006 (uncapped)
		200	D3007 (uncapped)
		50	D3024 (capped)
		200	D3025 (capped)
ZR-96 Genomic DNA Kit™	High-output genomic DNA purification from whole blood, tissue culture cells, solid tissue and liquid samples. No requirement for beads or phenol chloroform.	2x96	D3010
		4x96	D3011
ZR Soil Microbe DNA Kit™	Simple, rapid isolation of humic-free, PCR-quality genomic DNA from soil microbes.	50	D6001
ZR Fungal/Bacterial DNA Kit™	Simple, rapid isolation of PCR-quality genomic DNA from fungi.	50	D6005
ZR Fecal DNA Kit™	Simple, rapid isolation of PCR-quality genomic DNA from feces.	50	D6010
ZR Viral DNA Kit™	Isolation of viral DNA from cell-free body fluids or sample mixtures containing cells at concentrations less than 10 ⁵ cells per ml.	50	D3015
		200	D3016
ZR-96 Viral DNA Kit™	High-output (96-well) isolation of viral DNA from cell-free body fluids or sample mixtures containing cells at concentrations less than 10 ⁵ cells per ml.	2x96	D3017
		4x96	D3018
EZ DNA Methylation™ Kit	Streamlined kit for the conversion of unmethylated cytosines in DNA to uracil via the <u>chemical-denaturation</u> of DNA using our specially designed CT Conversion Reagent™. DNA is then desulphonated and subsequently cleaned using <i>Fast-Spin</i> column technology. Ultra-pure recovered DNA can be used for PCR and bisulfite sequencing applications.	50	D5001
		200	D5002
		2x96	D5003 (Shallow-well)
		2x96	D5004 (Deep-well)
EZ DNA Methylation-Gold™ Kit	Streamlined kit for the conversion of unmethylated cytosines in DNA to uracil via <u>heat-denaturation</u> of DNA using our specially designed CT Conversion Reagent™. DNA is then desulphonated and subsequently cleaned using <i>Fast-Spin</i> column technology. Ultra-pure recovered DNA can be used for PCR and bisulfite sequencing applications. <i>3 hour processing time!</i>	50	D5005
		200	D5006
		2x96	D5007 (Shallow-well)
		2x96	D5008 (Deep-well)
EZ DNA Methylation-Direct™ Kit	Bisulfite conversion of DNA directly from blood, cells, and tissue.	50	D5020
		200	D5021
		2x96	D5022 (Shallow-well)
		2x96	D5023 (Deep-well)

*Bulk quantities are available upon request. Please contact: busdev@zymoresearch.com or call 1-888-882-9682 for assistance.

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