



ZYMO RESEARCH

DNA
Purification
MADE SIMPLE
Made Simple™

ZR DNA Sequencing Clean-up Kit™

For the removal of post-cycle sequencing reaction contaminants (*i.e.*, unincorporated fluorescent dyes, residual salts, dNTPs, primers, and enzymes) from DNA extension products.

Highlights

- Simple 2 Minute Bind, Wash, Elute Procedure
- Flexible 6-20 μ l Elution Volumes Allow for Direct Loading of Samples with no Precipitation or Drying Steps
- Complete Elimination of “Dye Blobs” with High Quality Phred Scores and Long Read Lengths
- Reusable Spin Columns that Support Both Gel and Capillary Electrophoresis Platforms

Catalog Numbers:
D4050, D4051



Scan with your smart-phone camera to view the online protocol/video.



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Product Contents

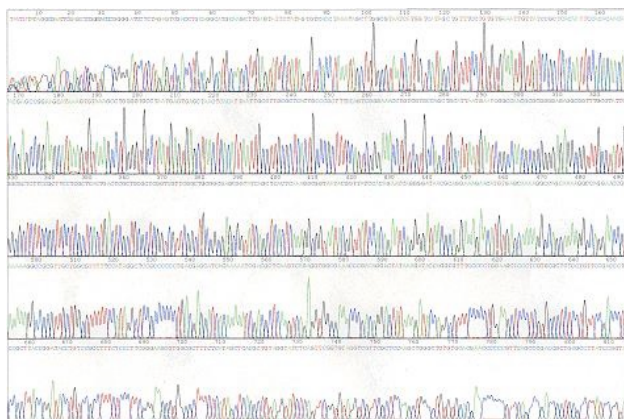
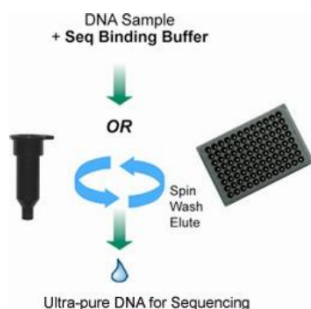
ZR DNA Sequencing Clean-up Kit [™]	D4050 (50 Preps.)	D4051 (200 Preps.)	Storage
Sequencing Binding Buffer	14 ml	55 ml	Room Temp.
Sequencing Wash Buffer	20 ml	70 ml	Room Temp.
Zymo-Spin [™] IB Columns	50	200	Room Temp.
Collection Tubes	50	200	Room Temp.
Instruction Manual	1	1	-

Specifications

- **Format** – Spin column.
- **Sample Sources** – Dye terminator sequencing reactions: Big Dye Terminator and other fluorescent based sequencing reactions.
- **DNA Purity** – High quality, sequencing-ready DNA products that are free of unincorporated dye terminators, dNTPs, enzymes, and residual salts.
- **Equipment** – Microcentrifuge

Product Description

The **ZR DNA Sequencing Clean-up Kit™** provides a simple method for the rapid removal of post-cycle sequencing reaction contaminants (*i.e.*, unincorporated fluorescent dyes, residual salts, dNTPs, primers, and enzymes) from DNA extension products. These contaminants can often interfere with the quality and signal strength of sequencing data. In particular, unincorporated dyes can result in dye peaks (“dye blobs”) which may obscure portions of the sequencing chromatogram and interfere with base-calling accuracy of sequencing analysis software. The **ZR DNA Sequencing Clean-up Kit™** employs a single-buffer system that allows for efficient DNA adsorption onto the matrix of the supplied **Zymo-Spin™ IB Column**. The DNA is washed then eluted with a small volume of water or loading dye containing formamide. The entire DNA purification procedure typically takes about 2 minutes.



Sequencing chromatogram of pGEM® DNA generated using an ABI 3730xl DNA analyzer. DNA was labeled with ABI BigDye Terminator v3.1 and cleaned using the **ZR DNA Sequencing Clean-up Kit™**.

Protocol

Sample Processing

1. Add 240 μ l of **Sequencing Binding Buffer** to a 5-20 μ l sequencing reaction.

Note: Alternatively, 5-20 μ l sequencing reaction can be mixed with 240 μ l **Sequencing Binding Buffer** that has already been added to the **Zymo-Spin™ IB Column**.

2. Transfer mixture to a provided **Zymo-Spin™ IB Column** in a **Collection Tube**.
3. Centrifuge at 13,000 rpm (15,000 - 16,000 x g) for 30 seconds.
4. Add 300 μ l **Sequencing Wash Buffer** to the column. Centrifuge at 13,000 rpm (15,000 - 16,000 x g) for 30 seconds.
5. Add 6-20 μ l water directly to the column matrix. Transfer the column to a 1.5 ml microcentrifuge tube and centrifuge at 13,000 rpm (15,000 - 16,000 x g) for 15 seconds to elute the DNA.

Note: A formamide solution ($\leq 20\%$) may also be used to elute the DNA.

Ultra-pure DNA is now ready to be loaded into the sequencer.

Column Re-generation Procedure

Note: Columns may be regenerated up to 10X pending no damage to the column or matrix. If columns are regenerated, additional buffers will have to be ordered separately.

1. Add 500 μ l of 0.1% HCl to spin column and incubate at room temperature for 30 minutes.
2. Centrifuge at 13,000 rpm (15,000 - 16,000 x g) for 30 seconds.
3. Let dry overnight at 37°C.
4. Spin columns are now ready for use.

Ordering Information

Product Description	Catalog No.	Size
ZR DNA Sequencing Clean-up Kit™	D4050 D4051	50 Preps. 200 Preps
ZR-96 DNA Sequencing Clean-up Kit™	D4052 D4053	2 x 96 Preps. 4 x 96 Preps.

Individual Kit Components	Catalog No.	Amount
Sequencing Binding Buffer	D4050-1-14 D4050-1-55	14 ml 55 ml
Sequencing Wash Buffer	D4050-2-20 D4050-2-70	20 ml 70 ml
Zymo-Spin™ IB Columns	C1014-50	50 Pack
Collection Tubes	C1001-50 C1001-500 C1001-1000	50 Pack 500 Pack 1000 Pack



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or your money back.**

Zymo Research is committed to simplifying your research with quality products and services. If you are dissatisfied with this product for any reason, please call 1(888) 882-9682.

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 the highest performance and reliability.

This product is for research use only and should only be used by trained professionals. It is not for use in diagnostic procedures. 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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