

INSTRUCTION MANUAL

ssDNA/RNA Clean & Concentrator™

Catalog Nos. D7010 & D7011

Highlights

- Quick (*10 minute*) method for separating, cleaning and concentrating single stranded DNA or RNA.
- Ideal for non-enzymatic elimination of genomic DNA, purification of transcripts, probes, primers *etc.*
- *Fast-Spin* column technology allows for elution into minimal volumes ($\geq 6 \mu\text{l}$).

Contents

Product Contents	1
Specifications.....	1
Product Description.....	2
Buffer Preparation.....	3
Protocol.....	3
Ordering Information	4

Satisfaction of all Zymo Research products is guaranteed. If you should be dissatisfied with this product please call 1-888-882-9682.

Product Contents

ssDNA/RNA Clean & Concentrator™ (Kit Size)	D7010 (20 Preps.)	D7011 (50 Preps.)	Storage Temperature
DNA/RNA Binding Buffer	10 ml	25 ml	Room Temp.
DNA/RNA Prep Buffer	10 ml	25 ml	Room Temp.
DNA/RNA Wash Buffer¹ (concentrate)	6 ml	12 ml	Room Temp.
DNase/RNase-Free Water	1 ml	1 ml	Room Temp.
Zymo-Spin™ IC Columns	20	50	Room Temp.
Zymo-Spin™ IIC Columns	20	50	Room Temp.
Collection Tubes	40	2x 50	Room Temp.
Instruction Manual	1	1	-

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 the highest performance and reliability.

Specifications

- **Sample Sources** – Mixtures of double and single stranded DNA and RNA species with single stranded fragments 17 to 200 nucleotides (e.g., short transcripts, probes, primers).
- **Format** – Spin column.
- **DNA/RNA Purity** – High quality DNA/RNA ($A_{260}/A_{280} > 1.8$, $A_{260}/A_{230} > 1.8$) suitable for all downstream manipulations.
- **DNA/RNA Recovery** – Up to 10 µg ssDNA/RNA can be purified and eluted into ≥6 µl water allowing for a highly concentrated sample.
- **RNA Storage** – RNA is eluted with RNase-free water and can be stored at ≤-70 °C. The addition of RNase inhibitors is highly recommended for prolonged storage.
- **Equipment Needed** – Microcentrifuge.

Notes:

¹ Add 24 ml 100% ethanol (26 ml of 95% ethanol) to the 6 ml **DNA/RNA Wash Buffer** concentrate (D7010) or 48 ml 100% ethanol (52 ml of 95% ethanol) to the 12 ml **DNA/RNA Wash Buffer** concentrate (D7011) before use.

Note - ™ Trademarks of Zymo Research Corporation. This product is for research use only and should only be used by trained professionals. It is not intended 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.

ZYMO RESEARCH CORP.

Phone: (949) 679-1190 ▪ Toll Free: (888) 882-9682 ▪ Fax: (949) 266-9452 ▪ info@zymoresearch.com ▪ www.zymoresearch.com

Product Description

ssDNA/RNA Clean & Concentrator™ provides a simple and reliable method for the rapid separation, clean-up and concentration of up to ~5 µg (per prep.) of single stranded DNA and/or RNA from double stranded species (*e.g.*, genomic DNA). This simple procedure is based on the use of a unique single-buffer system and *Fast-Spin* column technology. Single stranded DNA or RNA 17 to 200 nucleotides (*e.g.*, short transcripts, probes, primers) can be safely treated and recovered using this kit. The result is highly-concentrated, purified DNA/RNA that is suitable for subsequent molecular methods including PCR, RT-PCR, hybridization, *etc.*

The entire procedure typically takes about 10 minutes.

For **Assistance**, please contact Zymo Research Technical Support at 1-888-882-9682 or e-mail tech@zymoresearch.com.

Buffer Preparation

Before starting, add 24 ml 100% ethanol (26 ml 95% ethanol) to the 6 ml **DNA/RNA Wash Buffer** concentrate (D7010) or 48 ml 100% ethanol (52 ml 95% ethanol) to the 12 ml **DNA/RNA Wash Buffer** concentrate (D7011).

Protocol

1. Add 2 volumes of **DNA/RNA Binding Buffer** to the sample¹ (e.g., 200 μ l buffer to 100 μ l sample) and mix well.
2. Transfer the mixture to the **Zymo-Spin™ IIC Column** in a **Collection Tube** and centrifuge at $\geq 12,000 \times g$ for 30 seconds. *Save the flow-through!*
3. Add 1 volume ethanol (95-100%) to the flow-through in the **Collection Tube** (e.g., 300 μ l ethanol to 300 μ l flow-through), and mix well by pipetting.
4. Transfer the mixture to the **Zymo-Spin™ IC Column** in a **Collection Tube** and centrifuge at $\geq 12,000 \times g$ for 30 seconds. Discard the flow-through.
5. Add 400 μ l **DNA/RNA Prep Buffer** to the column and centrifuge at $\geq 12,000 \times g$ for 30 seconds. Discard the flow-through.
6. Add 700 μ l **DNA/RNA Wash Buffer** to the column and centrifuge at $\geq 12,000 \times g$ for 30 seconds. Discard the flow-through and repeat *Step 6* with 400 μ l **DNA/RNA Wash Buffer**.
7. Centrifuge the **Zymo-Spin™ IC Column** in an emptied **Collection Tube** at $\geq 12,000 \times g$ for 2 minutes. Transfer the column into an RNase-free tube (not provided).
8. Add $\geq 6 \mu$ l **DNase/RNase-Free Water**² directly to the column matrix and let stand for 1 minute at room temperature. Centrifuge at $\geq 12,000 \times g$ for 30 seconds. The eluted DNA/RNA can be used immediately or stored at or below -20°C .

Notes:

¹ Minimal recommended sample volume is 50 μ l. Adjust samples $< 50 \mu$ l with DNase/RNase-free water.

² To maximize DNA/RNA yield, increase the elution volume ($\geq 15 \mu$ l) and/or repeat the elution.

Ordering Information

Product Description	Catalog No.	Kit Size
ssDNA/RNA Clean & Concentrator™	D7010	20 Preps.
	D7011	50 Preps.

For Individual Sale	Catalog No.	Amount
DNA/RNA Binding Buffer	D7010-1-10	10 ml
	D7010-1-25	25 ml
	D7010-1-50	50 ml
DNA/RNA Prep Buffer	D7010-2-10	10 ml
	D7010-2-25	25 ml
DNA/RNA Wash Buffer (concentrate)	D7010-3-6	6 ml
	D7010-3-12	12 ml
Zymo-Spin™ IC Columns	C1004-50	50
	C1004-250	250
Zymo-Spin™ IIC Columns	C1011-50	50
	C1011-250	250
Collection Tubes	C1001-50	50
	C1001-500	500
	C1001-1000	1000
DNase/RNase-Free Water	W1001-1	1 ml
	W1001-4	4 ml
	W1001-6	6 ml
	W1001-10	10 ml

ZYMO RESEARCH CORP.



ZYMO RESEARCH

The Beauty of Science is to Make Things Simple

ZYMO RESEARCH CORP.

Phone: (949) 679-1190 ▪ Toll Free: (888) 882-9682 ▪ Fax: (949) 266-9452 ▪ info@zymoresearch.com ▪ www.zymoresearch.com