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The Beauty of Science is to Make Things Simple

INSTRUCTION MANUAL

ZymoBead™ Genomic DNA Kit

Catalog Nos. **D3004** & **D3005**

Highlights

- Easy purification of high quality DNA from whole blood, plasma, serum, body fluids, buffy coat, lymphocytes, tissue, swabs or cultured cells in less than 20 minutes using innovative *ZymoBead™* silica-bead technology.
- Compatible with commonly used anticoagulants (i.e., EDTA, heparin, citrate).
- Unique extraction technology excludes the use of Proteinase K and organic denaturants.
- Isolated DNA is ideal for PCR, endonuclease digestion, bisulfite conversion/methylation detection, sequencing, genotyping, 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

ZymoBead™ Genomic DNA Kit (Kit Size)	D3004 (100 Preps.)	D3005 (400 Preps.)	Storage Temperature
Genomic Lysis Buffer*	50 ml	2 x 100 ml	Room Temp.
DNA Pre-Wash Buffer**	30 ml	2 x 50 ml	Room Temp.
g-DNA Wash Buffer	50 ml	200 ml	Room Temp.
DNA Elution Buffer	4 ml	16 ml	Room Temp.
ZymoBeads™	1 ml	4 x 1ml	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 maximal performance and reliability.

*For optimal performance, add beta-mercaptoethanol to 0.5%(v/v) i.e., 250 µl per 50 ml or 500 µl per 100 ml.

**A precipitate may have formed in the DNA Pre-Wash Buffer during shipping. To completely resuspend the buffer, incubate the bottle at 30-37 °C for 30 minutes and mix by inversion. DO NOT MICROWAVE.

Specifications

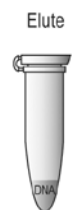
- **Sample Sources** – Whole blood, plasma, or serum from humans, mice, rats, etc. Also, tissue, cells from culture, buccal cells, as well as a variety of biological liquids are effectively processed using this kit.
- **DNA Purity** – High-quality DNA is eluted with **DNA Elution Buffer** or water. DNA is well suited for PCR and other downstream applications. Typical absorption indices are $A_{260}/A_{280} > 1.8$
- **DNA Size Limits** – Capable of recovering DNA up to and above 40 kb. In most instances, mitochondrial DNA and viral DNA (if present) will also be recovered.
- **ZymoBead™ Binding Capacity** – ~5 µg DNA per 10 µl ZymoBead™ slurry.
- **DNA Recovery** – Typically, DNA is eluted into 35 µl **DNA Elution Buffer** or water for the standard procedure. Human whole blood will yield 3-7 µg DNA per 100 µl blood sampled. Mammalian tissues yield: 1-3 µg DNA per mg skeletal, heart, and brain tissues and 3-5 µg DNA per mg liver, kidney and lung tissues.
- **Equipment** – microcentrifuge, vortex

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.

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Product Description

The **ZymoBead™ Genomic DNA Kit** is a simple procedure for the rapid isolation of total DNA (e.g., genomic, mitochondrial, viral) from a variety of biological sample sources. This product has been optimized for maximal recovery of ultra-pure DNA without RNA contamination and is compatible with whole blood (fresh or stored), serum, plasma, buffy coat, solid tissue, bone marrow and buccal cells, cells from culture, and many biological liquid samples. For processing, simply add the specially formulated **Genomic Lysis Buffer** to a sample in a 1.5 ml tube, add **ZymoBeads™**, vortex, then centrifuge. There is no need for organic denaturants or Proteinase K digestion because of the unique chemistries featured in the kit that yield high-quality, purified DNA in just minutes (see below). PCR inhibitors are effectively removed during the purification process. DNA purified using the **ZymoBead™ Genomic DNA Kit** is suitable for PCR, nucleotide blotting, DNA sequencing, endonuclease digestion, bisulfite conversion/methylation analysis, and other downstream applications.



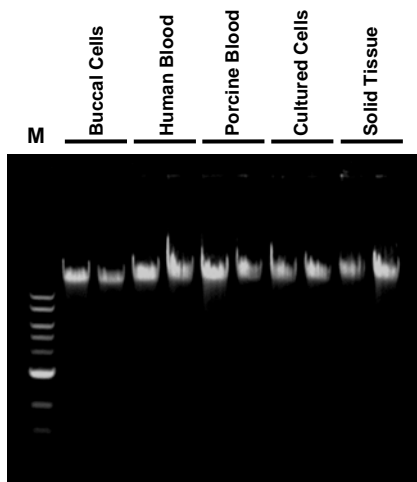
Sample + Lysing Buffer with beads

Wash Spin

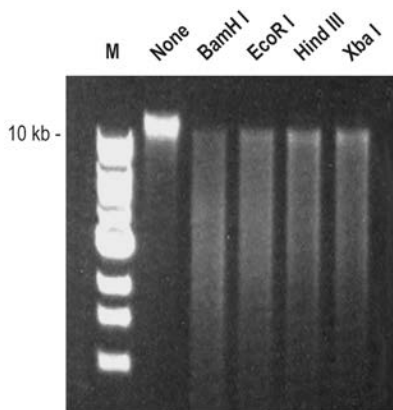
Elute

Ultra-pure DNA is ideal for...

- ✓ PCR
- ✓ Endonuclease Digestion
- ✓ Genotyping
- ✓ Bisulfite Conversion & Methylation Analysis



DNA isolation from different sources using the **ZymoBead™ Genomic DNA Kit**. Purifications were performed in duplicate for each sample and an equal volume of eluted DNA was loaded into each lane of a 0.8% (w/v) TAE/agarose/ethidium bromide gel. M is a 1 kb DNA ladder.



Restriction endonuclease digestion of DNA purified with the **ZymoBead™ Genomic DNA Kit**. M is a 1 kb DNA ladder.

The **Quick-gDNA™ MicroPrep** (D3020, D3021) and **Quick-gDNA™ MiniPrep** (D3006, D3007, D3024, D3025) provides spin column alternatives for isolation of up to 5 µg and 25 µg DNA/column, respectively.

Zymo Research offers the following for rapid, precise DNA methylation detection...

- 1.) **EZ DNA Methylation™ Kit** (D5001, D5002, D5003, D5004)
- 2.) **EZ DNA Methylation-Gold™ Kit** (D5005, D5006, D5007, D5008)
- 3.) **EZ DNA Methylation-Direct™ Kit** (D5020, D5021, D5022, D5023)

For **Technical Assistance**, please contact those at **Zymo Research's Technical Department** at 1-888-882-9682 or E-mail to tech@zymoresearch.com.

For small DNA fragment isolation, add 0.3 volumes isopropanol to the mixture. (For example, to a 1 ml mixture of serum, Genomic Lysis Buffer and ZymoBeads™, add 300 µl isopropanol.)

The pellet should be completely resuspended to ensure no impurities are transferred to the next step.

Elution of DNA from the ZymoBeads™ is dependent on pH and temperature. If water is used, ensure the pH is >6.0. Also, the total yield may be improved by eluting the DNA with Elution Buffer or water pre-equilibrated to 60-70°C.

Buffer Preparation

For optimal performance, add beta-mercaptoethanol (user supplied) to the **Genomic Lysis Buffer** to a final dilution of 0.5%(v/v) i.e., 250 µl per 50 ml or 500 µl per 100 ml.

PROTOCOLS

Whole Blood, Serum, and Plasma Samples

The following is for the purification of DNA from 50 µl whole blood, serum or plasma (Scale reagents proportionally when sampling lower or higher volumes). Fresh, frozen, or preserved blood (in EDTA, citrate, or heparin) can be used. If whole blood cannot be processed immediately, the sample can be “stabilized” for later processing (as noted below) although the immediate processing of blood samples is recommended.

1. Ensure the **ZymoBead™** slurry is fully resuspended by vortexing. In a 1.5 ml tube, add 200 µl of **Genomic Lysis Buffer** to 50 µl of blood, then add 10 µl **ZymoBeads™**. Mix by inversion, and then incubate at room temperature for 5 minutes. Centrifuge the tube at 1,500 x g for 1 minute. Carefully remove the supernatant without disturbing the bead pellet.
2. Add 200 µl of **Genomic Lysis Buffer** to the **ZymoBeads™**. Resuspend pellet by pipetting up and down. Centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
3. Add 200 µl of **DNA Pre-Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet, transfer to a new tube, and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
4. Add 500 µl of **g-DNA Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant. Recentrifuge briefly and remove any residual wash buffer.
5. Add ≥35 µl of **Elution Buffer** or water, resuspend pellet by pipetting up and down, and then centrifuge at 10,000 x g for 1 minute.
6. Collect the supernatant. The supernatant contains purified DNA that can be used immediately or stored (e.g., -20°C) for later use.

Delayed Processing of Blood Samples: The immediate processing of blood with this kit is recommended. However, if blood cannot be processed immediately, samples can be “stabilized” in **Genomic Lysis Buffer** for processing at a later time. This can be achieved by adding four volumes of **Genomic Lysis Buffer** to each volume of whole blood (4:1). Blood samples mixed with **Genomic Lysis Buffer** can be stored at room temperature for 7 days, 0-4°C for up to 15 days, -20°C for 2 months, or <-70°C for many years. Samples stored at ≤4°C should reach room temperature prior to the addition of **ZymoBeads™** as given in the standard protocol (above).

Buccal Cells and Swabs

Buccal cells can be isolated using a rinse- or swab-based isolation method.

- A. **Rinse Method:** Vigorously rinse 10-20 ml of saline solution or mouthwash orally for 30 seconds. The more vigorous the rinsing action, the more cells that will be recovered. Spit the solution into a 50 ml tube and pellet the cells at 1,500 x *g* for 5 minutes. Discard the supernatant without disturbing the cell pellet. Add 500 µl of **Genomic Lysis Buffer** to the pellet then vortex for 4-6 seconds.
- B. **Swab Isolation Method:** Thoroughly rinse mouth out before isolating cells. Brush the inside of the cheek with a buccal swab for 15 seconds (approximately 20 brushes), making sure to cover the entire area of the inner cheek. Rinse the brush with 500 µl of **Genomic Lysis Buffer** into a microcentrifuge tube and vortex for 4-6 seconds.
1. Ensure the **ZymoBeads™** are fully resuspended by vortexing. Add 10 µl **ZymoBeads™** to the **Genomic Lysis Buffer**/cell mixture in A or B (above). Mix by inversion, and then incubate at room temperature for 5 minutes. Centrifuge the tube at 1,500 x *g* for 1 minute. Discard the supernatant.
 2. Add 200 µl of **Genomic Lysis Buffer** to the **ZymoBeads™**. Resuspend pellet by pipetting up and down. Centrifuge at 1,500 x *g* for 1 minute. Discard the supernatant.
 3. Add 200 µl of **DNA Pre-Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet, transfer to a new tube, and then centrifuge at 1,500 x *g* for 1 minute. Discard the supernatant.
 4. Add 500 µl of **g-DNA Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet and then centrifuge at 1,500 x *g* for 1 minute. Discard the supernatant. Recentrifuge briefly and remove any residual wash buffer.
 5. Add ≥35 µl of **Elution Buffer** or water, resuspend pellet by pipetting up and down, and then centrifuge at 10,000 x *g* for 1 minute.
 6. Collect the supernatant. The supernatant contains purified DNA that can be used immediately or stored (e.g., -20°C) for later use.

Elution of DNA from the ZymoBeads™ is dependent on pH and temperature. If water is used, ensure the pH is >6.0. Also, the total yield may be improved by eluting the DNA with Elution Buffer or water pre-equilibrated to 60-70°C.

Soft tissue samples are readily homogenized using our **Squisher™-Single**, **Squisher™-8**, and **Squisher™-96** products.

Typical yields are: 1-3 µg DNA per mg skeletal, heart, and brain tissues and 3-5 µg per mg liver, kidney, and lung tissues.

Elution of DNA from the ZymoBeads™ is dependent on pH and temperature. If water is used, ensure the pH is >6.0. Also, the total yield may be improved by eluting the DNA with Elution Buffer or water pre-equilibrated to 60-70°C.

Solid Tissue Samples

Note: For Proteinase K digested materials (e.g., tailsnips) follow the protocol for **Cell Suspensions and Proteinase K Digested Samples** (pg. 7). Otherwise, mechanically homogenize up to 5 mg of fresh or frozen tissue in 500 µl of **Genomic Lysis Buffer**. (Increase the reagents proportionally if more than 5 mg of solid tissue is used).

1. Centrifuge the lysate at top speed (10,000 x g) for 5 minutes. Making sure not to disturb the pelleted debris, transfer the supernatant to a clean microcentrifuge tube.
2. Ensure the **ZymoBeads™** are fully resuspended by vortexing. Add 10 µl **ZymoBeads™** to the supernatant. Mix by inversion, and then incubate at room temperature for 5 minutes. Centrifuge the tube at 1,500 x g for 1 minute. Discard the supernatant.
3. Add 200 µl of **Genomic Lysis Buffer** to the **ZymoBeads™**. Resuspend pellet by pipetting up and down. Centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
4. Add 200 µl of **DNA Pre-Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet, transfer to a new tube, and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
5. Add 500 µl of **g-DNA Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant. Recentrifuge briefly and remove any residual wash buffer.
6. Add ≥35 µl of **Elution Buffer** or water, resuspend pellet by pipetting up and down, and then centrifuge at 10,000 x g for 1 minute.
7. Collect the supernatant. The supernatant contains purified DNA that can be used immediately or stored (e.g., -20°C) for later use.

Cell Monolayer Samples

The following procedure is designed for up to 1.0×10^6 monolayer cells (roughly equal to one well of a 6-well plate or ½ of a T25 flask). Although cell types and culture conditions may vary, the protocol will work with high-density growth cells (e.g., HeLa cells) as well as with low-density growth cells (e.g., neuronal cells). The procedure may be scaled up or down for increases or decreases in the amounts of monolayer cells sampled (see the **Guidelines for Monolayer Cell DNA Isolation** below).

1. Trypsinize or manually scrape adherent cells from the growth surface of a culture flask or plate. Centrifuge the cell suspension at approximately 500 x g for 5 minutes. Remove the supernatant and add 500 µl of **Genomic Lysis Buffer** directly to the pellet. Resuspend pellet by vortexing 4-6 seconds.

Alternatively: Cells can be lysed directly in the culture container by removing the medium and adding the Genomic Lysis Buffer directly to the monolayer surface.

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2. Ensure the **ZymoBeads™** are fully resuspended by vortexing. Add 10 μ l **ZymoBeads™** to the supernatant. Mix by inversion, and then incubate at room temperature for 5 minutes. Centrifuge the tube at 1,500 x g for 1 minute. Discard the supernatant.
3. Add 200 μ l of **Genomic Lysis Buffer** to the **ZymoBeads™**. Resuspend pellet by pipetting up and down. Centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
4. Add 200 μ l of **DNA Pre-Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet, transfer to a new tube, and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant.
5. Add 500 μ l of **g-DNA Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet and then centrifuge at 1,500 x g for 1 minute. Discard the supernatant. Recentrifuge briefly and remove any residual wash buffer.
6. Add ≥ 35 μ l of **Elution Buffer** or water, resuspend pellet by pipetting up and down, and then centrifuge at 10,000 x g for 1 minute.
7. Collect the supernatant. The supernatant contains purified DNA that can be used immediately or stored (e.g., -20°C) for later use.

Elution of DNA from the ZymoBeads™ is dependent on pH and temperature. If water is used, ensure the pH is > 6.0. Also, the total yield may be improved by eluting the DNA with Elution Buffer or water pre-equilibrated to 60-70°C.

Guidelines for Monolayer Cell DNA Isolation: The above procedure is designed for the processing of $0.1-1.0 \times 10^6$ cells. However, cell numbers (growth densities) can vary between different cell types. Table 1 (below) provides an approximation of what can be recovered from different culture containers for high-density growth cells like CV1 and HeLa cells. The table provides a guideline when adjusting reagent volumes used in the protocol. *(Increase the reagents proportionally if more than 1.0×10^6 cells are processed).*

Table 1: Culture Plate/Flask Growth Area (cm²) and Cell Number

Culture Container	Well /Flask Surface Area	Cell Number
96-well plate (each well)	0.32-0.6 cm ²	$4-5 \times 10^4$
24-well plate (each well)	2 cm ²	$1-3 \times 10^5$
12-well plate (each well)	4 cm ²	$4-5 \times 10^5$
6-well plate (each well)	9.5 cm ²	$0.5-1 \times 10^6$
T25 Culture Flask	25 cm ²	$2-3 \times 10^6$
T75 Culture Flask	75 cm ²	$0.6-1 \times 10^7$
T175 Culture Flask	175 cm ²	$2-3 \times 10^7$

Cells should be processed directly from biological fluids or from suspension in PBS, TE, or compatible buffers.

If the cell number is $>1.0 \times 10^6$, increase the volume of ZymoBeads™ added to the sample. (e.g., 20 μ l ZymoBeads™ for 2.0×10^6 cells in 200 μ l PBS)

Elution of DNA from the ZymoBeads™ is dependent on pH and temperature. If water is used, ensure the pH is > 6.0 . Also, the total yield may be improved by eluting the DNA with Elution Buffer or water pre-equilibrated to 60-70°C.

Typical yields from Proteinase K digested tissues are: 1-3 μ g DNA per mg skeletal, heart, and brain tissues and 3-5 μ g per mg liver, kidney, and lung tissues.

Cell Suspensions and Proteinase K Digested Samples

The following protocol is designed for 200 μ l of biological liquid sample including CSF, buffy coat, body fluids (semen), and cell suspensions containing $\leq 1.0 \times 10^6$ cells as well as lysates derived from Proteinase K digested cells and tissues. (Scale reagents proportionally when sampling lower or higher volumes.)

1. Add 4 volumes of **Genomic Lysis Buffer** to each volume of liquid sample. (For example, for 200 μ l of sample, add 800 μ l of **Genomic Lysis Buffer**). Mix briefly by vortexing 4-6 seconds.

Note: For Proteinase K digested material, add 4 volumes of **Genomic Lysis Buffer** to each volume of lysate then mix briefly by vortexing. Centrifuge the mixture at top speed ($>10,000 \times g$) for 5 minutes. Transfer up to 1.0 ml supernatant to a new microcentrifuge tube and proceed to Step 2.

2. Ensure the **ZymoBeads™** are fully resuspended by vortexing. Add 10 μ l **ZymoBeads™** to the supernatant. Mix by inversion, and then incubate at room temperature for 5 minutes. Centrifuge the tube at 1,500 $\times g$ for 1 minute. Discard the supernatant.
3. Add 200 μ l of **Genomic Lysis Buffer** to the **ZymoBeads™**. Resuspend pellet by pipetting up and down. Centrifuge at 1,500 $\times g$ for 1 minute. Discard the supernatant.
4. Add 200 μ l of **DNA Pre-Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet, transfer to a new tube, and then centrifuge at 1,500 $\times g$ for 1 minute. Discard the supernatant.
5. Add 500 μ l of **g-DNA Wash Buffer** to the **ZymoBeads™**. Resuspend the pellet and then centrifuge at 1,500 $\times g$ for 1 minute. Discard the supernatant. Recentrifuge briefly and remove any residual wash buffer.
6. Add ≥ 35 μ l of **Elution Buffer** or water, resuspend pellet by pipetting up and down, and then centrifuge at 10,000 $\times g$ for 1 minute.
7. Collect the supernatant. The supernatant contains purified DNA that can be used immediately or stored (e.g., -20°C) for later use.

Troubleshooting:

1. **DNA degradation:** Check for DNase contamination. All reagents and components supplied with the **ZymoBead™ Genomic DNA Kit** are DNase-free. However, DNase contamination could result during the processing of some samples. Check pipets, pipet tips, microcentrifuge tubes, etc., and exercise the appropriate precautions during the DNA purification procedure.
2. **DNA is not performing well in subsequent experiments:** Ensure the correct volume of **Genomic Lysis Buffer** has been added to the sample. Also, make sure all centrifugation steps are completed for the indicated times and speeds (rcfs). Failure to do so may result in incomplete washing, which may cause salts to be eluted with the DNA affecting quantitation and subsequent experiments including enzymatic processes like PCR.
3. **RNA contamination:** The buffers in this kit are designed to efficiently hydrolyze and remove RNA during the DNA purification procedure.

Ordering Information

Product Description	Catalog No.	Kit Size
ZymoBead™ Genomic DNA Kit	D3004 D3005	100 Preps. 400 Preps.

For Individual Sale	Catalog No.	Amount
Genomic Lysis Buffer	D3004-1-50	50 ml
	D3004-1-100	100 ml
DNA Pre-Wash Buffer	D3004-5-15	15 ml
	D3004-5-30	30 ml
	D3004-5-50	50 ml
g-DNA Wash Buffer	D3004-2-50	50 ml
	D3004-2-100	100 ml
	D3004-2-200	200 ml
DNA Elution Buffer	D3004-4-4	4 ml
	D3004-4-16	16 ml
ZymoBeads™	D3004-3-1	1 ml
	D3004-3-4	4 x 1ml

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Popular DNA Purification Products from Zymo Research

Product	Format	Kit Size	Cat No.
Fragment DNA Clean-up, Concentration & Recovery			
DNA Clean & Concentrator™-5	Spin Column Format (up to 5 µg/prep.)	50 preps. 200 preps.	D4003*, D4013 D4004*, D4014
DNA Clean & Concentrator™-25	Spin Column Format (up to 25 µg/prep.)	50 preps. 200 preps.	D4005*, D4033 D4006*, D4034
DNA Clean & Concentrator™-100	Spin Column Format (up to 100 µg/prep.)	25 preps. 50 preps.	D4029 D4030
DNA Clean & Concentrator™-500	Spin Column Format (up to 500 µg/prep.)	10 preps. 20 preps.	D4031 D4032
ZR-96 DNA Clean & Concentrator™-5	96-Well Format (up to 5 µg/well; deep well)	2x96 preps. 4x96 preps.	D4023 D4024
Genomic DNA Clean & Concentrator™	Spin Column Format (up to 10 µg/prep.)	25 preps. 100 preps.	D4010 D4011
ZR-96 DNA Clean-up Kit™	96-Well Format (up to 5 µg/well; shallow well)	2x96 preps. 4x96 preps.	D4017 D4018
ZR DNA Sequencing Clean-up Kit™	Spin Column Format (up to 5 µg/prep.)	50 preps. 200 preps.	D4050 D4051
ZR-96 DNA Sequencing Clean-up Kit™	96-Well Format (up to 5 µg/well)	2x96 preps. 4x96 preps.	D4052 D4053
OneStep™ PCR Inhibitor Removal Kit	Spin Column Format (up to 25 µg/prep.)	50 preps.	D6030
OneStep-96™ PCR Inhibitor Removal Kit	96-Well Format (up to 5 µg/well)	2x96 preps.	D6035
Zymoclean™ Gel DNA Recovery Kit	Spin Column Format (up to 5 µg/prep.)	50 preps. 200 preps.	D4001 D4002
ZR-96 Zymoclean™ Gel DNA Recovery Kit	96-Well Format (up to 5 µg/well)	2x96 preps. 4x96 preps.	D4021 D4022
Zymoclean™ Large Fragment DNA Recovery Kit	Spin Column Format (up to 10 µg/prep.)	25 preps. 100 preps.	D4045 D4046
Plasmid DNA Isolation			
Zyppy™ Plasmid Miniprep Kit	Pellet Free, Spin Column Format	50 preps. 100 preps. 400 preps. 800 preps.	D4036 D4019 D4020 D4037
Zyppy™ Plasmid Midiprep Kit	Pellet Free, Spin Column Format	25 preps. 50 preps.	D4025 D4026
Zyppy™ Plasmid Maxiprep Kit	Spin/Vacuum Column Format	10 preps. 20 preps.	D4027 D4028
ZR Plasmid Miniprep™-Classic	Spin Column Format	100 preps. 400 preps. 800 preps.	D4015 D4016 D4054
ZR BAC DNA Miniprep Kit	BAC/PAC plasmid DNA Isolation. Spin Column Format	25 preps. 100 preps.	D4048 D4049
Environmental DNA Isolation			
ZR Soil Microbe DNA MicroPrep™	Bead Bashing, Spin Column Format (up to 5 µg/prep.)	50 preps.	D6003
ZR Soil Microbe DNA MiniPrep™	Bead Bashing, Spin Column Format (up to 25 µg/prep.)	50 preps.	D6001
ZR Soil Microbe DNA MidiPrep™	Bead Bashing, Spin Column Format (up to 125 µg/prep.)	25 preps.	D6101
ZR-96 Soil Microbe DNA Kit™	Bead Bashing, 96-Well Format (up to 5 µg/well)	2x96 preps.	D6002
ZR Fungal/Bacterial DNA MicroPrep™	Bead Bashing, Spin Column Format (up to 5 µg/prep.)	50 preps.	D6007
ZR Fungal/Bacterial DNA MiniPrep™	Bead Bashing, Spin Column Format (up to 25 µg/prep.)	50 preps.	D6005
ZR Fungal/Bacterial DNA MidiPrep™	Bead Bashing, Spin Column Format (up to 125 µg/prep.)	25 preps.	D6105
ZR-96 Fungal/Bacterial DNA Kit™	Bead Bashing, 96-Well Format (up to 5 µg/well)	2x96 preps.	D6006
ZR Fecal DNA MicroPrep™	Bead Bashing, Spin Column Format (up to 5 µg/prep.)	50 preps.	D6012
ZR Fecal DNA MiniPrep™	Bead Bashing, Spin Column Format (up to 25 µg/prep.)	50 preps.	D6010
ZR Fecal DNA MidiPrep™	Bead Bashing, Spin Column Format (up to 125 µg/prep.)	25 preps.	D6110
ZR-96 Fecal DNA Kit™	Bead Bashing, 96-Well Format (up to 5 µg/well)	2x96 preps.	D6011
ZR Tissue & Insect DNA MicroPrep™	Bead Bashing, Spin Column Format (up to 5 µg/prep.)	50 preps.	D6015
ZR Tissue & Insect DNA MiniPrep™	Bead Bashing, Spin Column Format (up to 25 µg/prep.)	50 preps.	D6016
ZR Tissue & Insect DNA MidiPrep™	Bead Bashing, Spin Column Format (up to 125 µg/prep.)	25 preps.	D6115
ZR-96 Tissue & Insect DNA Kit™	Bead Bashing, 96-Well Format (up to 5 µg/well)	2x96 preps.	D6017
ZR Plant/Seed DNA MicroPrep™	Bead Bashing, Spin Column Format (up to 5 µg/prep.)	50 preps.	D6022
ZR Plant/Seed DNA MiniPrep™	Bead Bashing, Spin Column Format (up to 25 µg/prep.)	50 preps.	D6020
ZR Plant/Seed DNA MidiPrep™	Bead Bashing, Spin Column Format (up to 125 µg/prep.)	25 preps.	D6120
ZR-96 Plant/Seed DNA Kit™	Bead Bashing, 96-Well Format (up to 5 µg/well)	2x96 preps.	D6021

* Uncapped Spin Column Format

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