ZYMO RESEARCH

The Beauty of Science is to Make Things Simple

DNA Purification *Made Simple*™

INSTRUCTION MANUAL

Quick-DNA™ Magbead Plus Kit

Catalog Nos. D4081 & D4082

Highlights

- Purify high-quality DNA easily and reliably from any biological fluid, cultured/monolayer cells, or tissue sample.
- The Zymo magbead purification system ensures DNA is ready for all sensitive downstream applications such as qPCR, DNA-sequencing, arrays, and methylation analysis.
- The automation friendly workflow enables biological fluids, cultured/monolayer cells, or solid tissues to be processed in as little as 60 minutes for 96 preps.

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

For automated scripts and **Technical Assistance** regarding generation of scripts for automated platforms, contact **Zymo Research's Technical Department** at 1-888-882-9682 or E-mail to tech@zymoresearch.com

Product Contents

***Quick*-DNA™ Magbead Plus Kit** (Kit Size)	**D4081** (1 x 96 preps.)	**D4082** (4 x 96 preps.)	**Storage Temperature**
Proteinase K & Storage Buffer	2 x 20 mg	8 x 20 mg	Room Temp.
Solid Tissue Digestion Buffer II	6 ml x 2	22 ml x 2	Room Temp.
Biofluid & Cell Buffer II	50 ml	200 ml	Room Temp.
***Quick*-DNA™ MagBinding Buffer**	150 ml	250 ml	Room Temp.
DNA Pre-Wash Buffer[1]	50 ml x 2	250 ml x 2	Room Temp.
gDNA Wash Buffer	200 ml	200 ml x 4	Room Temp.
DNA Elution Buffer	16 ml	50 ml	Room Temp.
MagBinding Beads	6 ml	12 ml x 2	Room Temp.

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.

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

Specifications

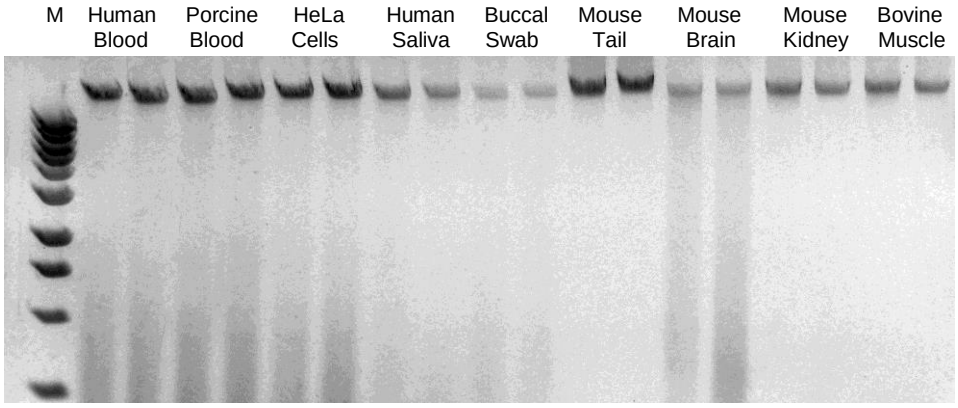
- **Sample Sources** – For total DNA isolation from ≤ 200 µl of whole blood, nucleated blood, buffy coat, saliva, sputum, semen, milk, tissue, cell culture, etc.
- **DNA Types** – The ***Quick*-DNA™ Magbead Plus Kit** will isolate total DNA including genomic, mitochondrial, plasmid, viral, parasitic, etc. from biological fluids, cells, or tissues. Not recommended for small cell-free DNA isolation from urine, serum, and plasma.
- **DNA Purity** - High quality DNA is ready for all sensitive downstream applications such as PCR, endonuclease digestion, Southern blotting, genotyping, Next-Generation Sequencing, bisulfite conversion, etc. (A_{260}/A_{230} ≥ 1.8).
- **DNA Size** - Capable of recovering genomic and mitochondrial DNA sized fragments > 50 kb. If present, parasitic, microbial, and viral DNA will also be recovered.
- **DNA Yield** - The DNA binding capacity of the MagBinding Beads is 10 µg per 50 µl of MagBinding Beads used.
- **Elution Volume** - DNA can be eluted into as little as 100 µl **DNA Elution Buffer** or water**.**
- **Equipment** – Centrifuge fitted with a 96 well microplate carrier, heat block (55˚C), 96-well magnetic stand (*i.e.*, **ZR-96 MagStand**, P1005), automated liquid handler (recommended), 2 mL 96 well plates[2] and reagent carriers (user supplied).
- **DNA Applications** – DNA isolated using the ***Quick*-DNA™ Magbead Plus Kit** can be used for life-science research, genotyping, livestock breeding, veterinary research, and routine applied testing among a variety of other applications.

Notes:

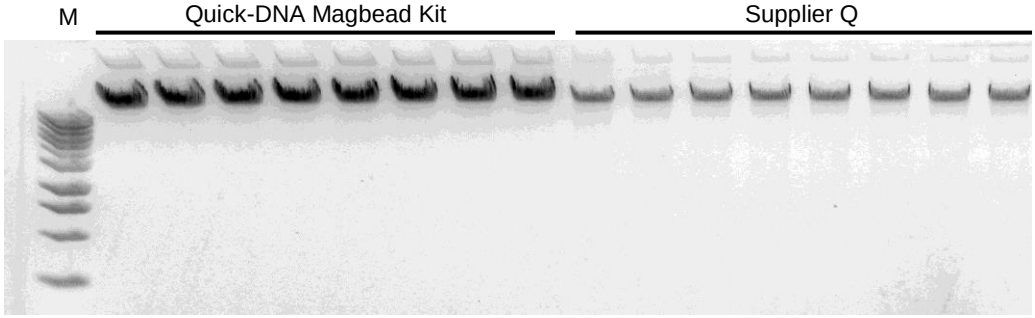
[2] Zymo Research's Deep Well Block (Cat. P1001-2) available at www.Zymoresearch.com

Product Description

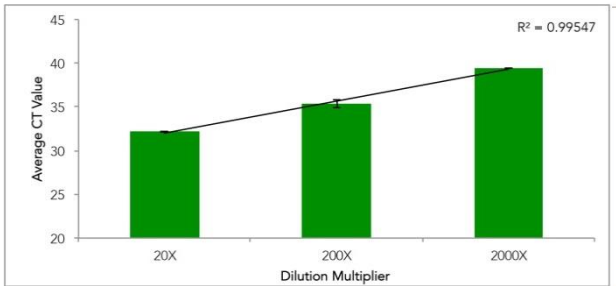
The ***Quick*-DNA™ Magbead Plus DNA Kit** is the easiest method for high throughput total DNA extraction (e.g., genomic, mitochondrial, viral) from any biological fluid, cell culture, or solid tissue sample. Innovative reagents and Zymo's unique system allows for a simple Bind, Wash, & Elute procedure that is unmatched in providing ultra-pure and concentrated genomic DNA (> 50 kb) in as little as 60 minutes for 96 samples. Purified DNA is ready for quantification or applications like library preparations. Isolated DNA is suitable for immediate use in sensitive downstream applications including qPCR, DNA-seq, arrays, and methylation analysis.



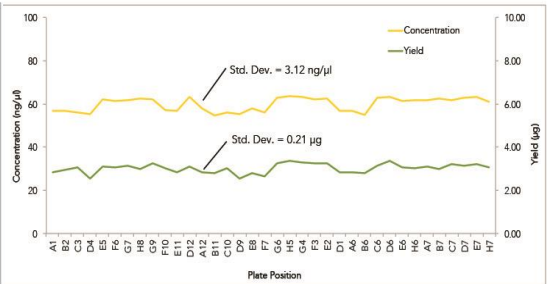
High Quality DNA Obtained from a Wide Range of Biological Samples Using the *Quick*-DNA™ Magbead Plus Kit. DNA purified using the *Quick*-DNA™ Magbead Plus Kit is ultrapure, highly concentrated, and ready for all downstream applications. Input DNA was analyzed in a 1% (w/v) TAE/agarose/EtBr gel (shown above). The size marker "M" is a 1 kb ladder (Zymo Research).



Superior Yields Obtained from the *Quick*-DNA™ Magbead Plus Kit when compared to Supplier Q's equivalent magbead purification kit. Samples containing 200 µl of human whole blood were purified using the *Quick*-DNA™ Magbead Plus Kit and Supplier Q's equivalent magnetic bead based kit. Input DNA was analyzed in a 1% (w/v) TAE/agarose/EtBr gel (shown above). Average A260/230 ≥ 1.8. The size market "M" is a 1 kb ladder (Zymo Research).



HSV-1 Viral DNA is Effectively Isolated from Plasma dilution series of HSV-1 spiked into porcine plasma and extracted using the *Quick*-DNA™ Magbead Plus Kit shows effective purification and subsequent qPCR amplification, even at 2,000:1 dilution. The no template controls did not amplify after 50 cycles.



Consistent Yields are Recovered When Using the Quick-DNA™ Magbead Plus Kit. When many samples of 200 µl blood from the same donor are processed using the *Quick*-DNA™ Magbead Plus Kit, consistent and accurate yields are recovered in every sample. Average A260/230 ≥ 1.8. N=36.

Procedure Overview

The ***Quick*-DNA™ Magbead Plus DNA Kit** facilitates rapid and efficient purification of DNA from any biological fluids, cells, or tissues by combining enzymatic and chemical extraction regimens.

Notes:

[1] Viral DNA from serum or plasma samples can also be processed using this workflow. Not recommended for cell-free DNA isolation from urine, serum, or plasma samples.

Biological Fluids & Cells

Biological Fluids: ≤ 200 µl
Whole blood, nucleated blood, semen, buffy coat, saliva, body fluids, milk, etc.[1]

Cultured Cells: ≤ 3x10^6
E. coli or mammalian cells (e.g. HeLa cells, buccal cells, HEK-293 cells, etc.).

Solid Tissues

Solid Tissues: ≤ 25 mg
Tail snips, ear punches, organ biopsies (Brain, liver, heart, kidney, muscle, stomach, bladder, intestine, etc.).

BioFluid & Cell Buffer II

Solid Tissue Buffer II

Proteinase K Digestion at 55°C

Quick-DNA MagBinding Buffer

Bind
Wash
Elute

Zymo-Magbead Technology

Ultra-Pure DNA

Protocol

✓ *Before Starting:* Add 1,060 µl **Proteinase K Storage Buffer** to each **Proteinase K (20 mg)** tube prior to use. The final concentration of **Proteinase K** is ~20 mg/ml. Store at -20ºC after mixing.

Sample Lysis

Biological Fluids & Cells

1. Add up to 200 µl[1] sample to a 2 mL 96-well plate and add:

   400 µl **BioFluid & Cell Buffer II**
   20 µl **Proteinase K**

2. Mix thoroughly or vortex the plate for 10-15 seconds and then incubate the plate at 55˚C for 30 minutes.
3. Add 600 µl ***Quick*-DNA™ MagBinding Buffer** to the digested sample. Mix well by pipette or shaker plate for 10 minutes.

Solid Tissues

1. To tissue samples (≤ 25 mg) in a 2 mL 96-well plate, add a solution of:

   95 µl Water
   95 µl **Solid Tissue Buffer II**
   10 µl **Proteinase K**

2. Mix thoroughly or vortex for 10-15 seconds and then incubate the plate at 55˚C for 1-3 hours or until tissue solubilizes. Mix thoroughly before proceeding.

   Note: To remove insoluble debris, centrifuge at ≥ 3,000 x *g* for 4 minutes. Transfer aqueous supernatant to a clean 96-well block.

3. Add 600 µl ***Quick*-DNA™ MagBinding Buffer** to the supernatant. Mix well by pipette or shaker plate for 10 minutes.

Sample Purification

Note: *For all mixing steps, either pipette mix or shake at 1200 rpm*

4. Dispense 50 µl of **MagBinding Beads** to each well. Mix well by pipette or shaker plate for 10 minutes.
5. Transfer the 96-Well Block to a magnetic stand until beads pellet, then aspirate and discard the supernatant. Remove the 96-Well Block from the magnetic stand.
6. Dispense 900 µl of **DNA Pre-Wash Buffer** and mix well by pipette or shaker plate for 5 minutes.
7. Transfer the 96-Well Block to a magnetic stand until beads pellet, then aspirate and discard the supernatant. Remove the 96-Well Block from the magnetic stand.
8. Dispense 900 µl **gDNA Wash Buffer** and mix well by pipette or shaker plate for 5 minutes.
9. Transfer the 96-Well Block to a magnetic stand until beads pellet, then aspirate and discard the supernatant. Remove the 96-Well Block from the magnetic stand.
10. Repeat the wash (Steps 5-6).
11. Transfer the 96-well block onto a heating element (55°C) until beads dry (approximately 10 minutes). If no heating element is available, air dry for approximately 20-30 minutes.
12. Dispense 100 µl of **DNA Elution Buffer** (75 µl minimum) to each well and re-suspend beads. Mix the beads for 10 minutes and then transfer the plate onto the magnetic stand for 2-3 minutes until the beads pellet.
13. Transfer the supernatant (containing the eluted DNA) to a clean Elution Plate[2, 3].

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Notes:

[1] If using < 200 µl sample, increase the volume to 200 µl using **DNA Elution Buffer** or an isotonic buffer (e.g. PBS) before continuing.

[2]The eluted DNA can be used immediately for molecular based applications or stored ≤ -20ºC for future use.

[3]For optimal spectrophotometric quantification, eluate may be centrifuged at 4,000 x g for 5 minutes and transfer eluate to a new plate while avoiding the pellet.

Automation Setup Guide

1. Add 60 ml of ***Quick*-DNA™ Magbinding Buffer** to a 96 well reagent trough.
2. Add 100 ml of **DNA-Pre Wash Buffer** to a 96 well reagent trough.
3. Add 200 ml of **gDNA Wash Buffer** to a 96 well reagent trough.
4. Add 16 ml of **DNA Elution Buffer** to a 96 well reagent trough.
5. Vortex the **Magbinding Beads** vigorously for 30 seconds, then add 6 ml to a 96 well low dead volume reagent trough.

Automation Protocol

1. Place the following components on the deck prior to initialization of the protocol:
    a. Place six 96-well racks of 300 µl standard volume tips on the deck.
    b. Place five 96-well racks of 1000 µl high volume tips on the deck.
    c. Place one 96-well rack of 50 µl low volume tips on the deck.
    d. Place a magnetic stand and a 96-well PCR plate on the deck.
    e. Place a 96-well plate containing the sample to be processed on the deck. (see **Sample Lysis** protocol on pg. 4)
    f. Place two empty 96-well reagent troughs for waste disposal.
2. Digest the sample according the Sample Lysis protocol on page 4.
3. Aspirate 600 µl ***Quick*-DNA™ Magbinding Buffer** from the appropriate reagent trough.
4. Dispense 600 µl ***Quick*-DNA™ Magbinding Buffer** into the 96-well block containing digested samples at a height of 2mm from the container bottom. After dispensing, pipette mix (400 µl for 15 cycles) 2 mm from the container bottom.
5. Premix the **MagBinding Beads** (50 µl for 10 cycles). Aspirate 50 µl **MagBinding Beads.**
6. Dispense 50 µl **MagBinding Beads** to the 96-well block 2 mm from the container bottom.
7. Using 1000 µl high volume tips, mix the lysate (600 µl for 25 cycles).
8. Transfer the 96-well block to a shaking device and shake at 1200 rpm for 3 minutes[1].
9. Transfer the 96-well block to a 96-well magnetic stand; allow it to stand for 2 minutes.
10. Using a slow aspirate mode (≤ 50 µl/s flow rate) remove 1240 µl (840 µl for tissue) supernatant and discard.
11. Transfer the 96-well block from the magnetic stand to a normal plate carrier.
12. Aspirate 900 µl **DNA Pre-Wash Buffer**.
13. Dispense 900 µl **DNA Pre-Wash Buffer** into the 96-well block 2 mm from the container bottom. After dispensing, pipette mix (400 µl for 25 cycles).
14. Transfer the 96-well block to a shaking device and shake at 1200 rpm for 2 minutes.
15. Transfer the 96-well block to a 96-well magnetic stand; allow it to stand for 2 minutes.
16. Using a slow aspirate mode (≤ 50 µl/s flow rate) remove 900 µl supernatant and discard.
17. Transfer the 96-well block from the magnetic stand to a normal plate carrier.
18. Aspirate 900 µl **gDNA Wash Buffer**.
19. Dispense 900 µl **gDNA Wash Buffer** into the 96-well block at a height of 2 mm from the container bottom. After dispensing, pipette mix (400 µl for 25 cycles).
20. Transfer the 96-well block to a shaking device and shake at 1200 rpm for 2 minutes.
21. Transfer the 96-well block to a 96-well magnetic stand; allow it to stand for 2 minutes.
22. Using a slow aspirate mode (≤ 50 µl/s flow rate) remove 900 µl supernatant and discard.
23. Transfer the 96-well block from the magnetic stand to a normal plate carrier.

Notes:

[1]If a shaker module is not installed, mix by pipetting for the duration of all shaking steps

24. Aspirate 900 µl **gDNA Wash Buffer**.
25. Dispense 900 µl **gDNA Wash Buffer** into the 96-well block at a height of 2 mm from the container bottom. After dispensing, pipette mix (400 µl for 25 cycles).
26. Transfer the 96-well block to a shaking device and shake at 1200 rpm for 2 minutes.
27. Transfer the 96-well block to a 96-well magnetic stand; allow it to stand for 2 minutes.
28. Using a slow aspirate mode (≤ 50 µl/s flow rate) remove 900 µl supernatant and discard.
29. Transfer the 96-well block onto a heating element (55°C) until beads dry (approximately 10 minutes). If no heating element is available, air dry for approximately 20-30 minutes.
30. Aspirate 100 µl **DNA Elution Buffer.**
31. Dispense 100 µl **DNA Elution Buffer** into the 96-well block at a height of 2mm from the container bottom. After dispensing, pipette mix (40 µl for 25 cycles).
32. Transfer the 96-well block to a shaking device and shake at 800 rpm for 3 minutes.
33. Transfer the 96-well block to a magnetic stand; allow it to stand for 2 minutes.
34. Aspirate 90 µl **DNA Elution Buffer** from the 96-well block.
35. Dispense 90 µl **DNA Elution Buffer** containing the eluted DNA to the elution plate. The DNA is now ready for downstream applications.[1]

Notes:

[1] For optimal spectrophotometric quantification, eluate may be centrifuged at 4,000 x g for 5 minutes then transferred to a new plate while avoiding the pellet.

Appendix A

Cell Monolayer Sample Preparation:

The following procedure is designed for up to 3 x 10^6 monolayer cells (dilute if necessary for proper cell counts). 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).

Trypsinize or scrape adherent cells from a culture flask or plate. Centrifuge the suspension at approximately 500 x *g* for 5 minutes. Remove the supernatant and resuspend the cell pellet in 1 ml PBS (Phosphate Buffered Saline) and then transfer suspension to a microcentrifuge tube. Centrifuge the suspension at approximately 500 x *g* for 5 minutes. Discard the supernatant and then follow the Biological Fluids & Cells workflow on Page 4.

Guidelines for Monolayer Cell DNA Isolation:

Cell numbers (growth densities) can vary between different cell types. Table 1 (below) provides an approximation of the cell numbers that can be recovered from different culture containers for "high-density" growth cells like CV1 and HeLa cells.

Table 1: Culture Plate/Flask Growth Area (cm^2) and Cell Number

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

Buccal Cells and Swabs:

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

A. Rinse Method: Vigorously rinse mouth with 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 saline into a 50 ml tube and pellet the cells at 1,500 rpm for 5 minutes. Discard the supernatant without disturbing the cell pellet. Then follow from Step 1 of the Biological Fluids & Cells workflow on Page 4.

B. Swab Isolation Method: Thoroughly rinse mouth out with water 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 into a 96-well plate using a solution of 200 µl of **BioFluid & Cell Buffer II** and 100 µl TE or another isotonic solution. Add 10 µl of **Proteinase K,** mix thoroughly, and incubate at 55˚C for 20 minutes. Then follow from Step 3 of the Biological Fluids & Cells workflow on Page 4 (dilute or remove sample if needed to reduce the cell count).

Appendix B

Nucleated Blood Samples

1. Add up to 5 µl of nucleated blood to the following in a microcentrifuge tube:

BioFluid & Cell Buffer II	50 µl
Proteinase K	5 µl
DNA Elution Buffer (or TE Solution)	45 µl

2. Mix thoroughly by pipetting up and down. Then incubate the tube at 55°C for 20 minutes.

   Note: The sample may not be completely homogenous before digesting.

3. Add 1 volume of **Quick-DNA™ MagBinding Buffer** to the tube and mix thoroughly by pipetting up and down. Ensure the sample is homogenous before continuing.

   Note: It may be necessary to pipette up and down many times to ensure the sample is homogenous. Vortexing will also help ensure the mixture is homogenous.

4. Proceed with step 4 of the protocol on page 4.

Appendix C

Hair and Feather Samples:

1. Freshly prepared DTT (dithiolthreitol) (not provided) needs to be added to each microcentrifuge tube containing sample (≤ 5 mg) as follows:

Water	40 µl
Solid Tissue Buffer II	45 µl
DTT (1 M)	5 µl
Proteinase K	10 µl

2. Mix thoroughly or vortex 10-15 seconds and then incubate the tube at 55°C for 1-3 hours.

   Note: Overnight digestions are possible without affecting the integrity of the DNA.

3. Add 300 µl **Quick-DNA™ MagBinding Buffer** to the tube and mix thoroughly by vortexing for 15 seconds. Centrifuge at ≥ 12,000 *x g* for 1 minute to pellet insoluble debris.

4. Proceed with step 4 of the protocol on page 4.

Appendix D

Samples Collected onto Storage Papers/Cards:

Rapid purification of inhibitor-free, PCR-quality DNA from blood, saliva, and cells collected onto Guthrie, FTA®, and other storage papers (cards). The procedure is easy; card punches are added directly to a ZR BashingBead™ Lysis Tube (2.0 mm) and thoroughly homogenized by bead beating (e.g. FastPrep®-24, or similar). Following Proteinase K digestion, the DNA is purified using innovative Zymo-Spin™ Technology. Eluted DNA is ideal for PCR, genotyping, etc.

ZR BashingBead Lysis Tubes (2.0 mm) (S6003-50) and Lysis Solution (D6001-3) purchased separately.

1. Add card samples (punches) to a **ZR BashingBead™ Lysis Tube (2.0 mm)**[1]. Add 400 µl **Lysis Solution**[2] to the tube.
2. Secure lysis tube in a bead beater fitted with a 2 ml tube holder assembly and process at maximum speed.

   Note: Processing times may be as little as 40 seconds when using high-speed disrupters (e.g., FastPrep®-24, or similar). See manufacturer's literature for operating instructions.
3. Centrifuge the **ZR BashingBead™ Lysis Tube (2.0 mm)** for 1 minute.
4. To the lysate in the **ZR BashingBead™ Lysis Tube (2.0 mm)**, add:

Proteinase K	40 µl
Solid Tissue Buffer II	360 µl

5. Mix and then incubate the tube at 55˚C for 10-15 minutes.
6. Centrifuge the **ZR BashingBead™ Lysis Tube (2.0 mm)** for 1 minute. Transfer 400 µl supernatant to a microcentrifuge tube.
7. Add 1200 µl **Quick-DNA™ MagBinding Buffer** to the tube and mix thoroughly.
8. Proceed with step 4 of the protocol on page 4.

Notes:

[1] **ZR BashingBead Lysis Tubes (2.0 mm)** (Catalog No. S6003-50)

[2] **Lysis Solution** (Catalog No. D6001-3-40 & D6001-3-150)

Troubleshooting Guide:

Problem	Possible Causes and Suggested Solutions
Low DNA Yield	
Increasing DNA Yields	• **The total yield may be improved** by eluting the DNA with DNA Elution Buffer pre-heated to 60-70˚C. • **For optimal elution results,** use 2 volumes of elution buffer per volume of Magbinding Beads used. • **Loading the eluate a second time,** mixing for 3 minutes at room temperature, and separating from magbeads.
Incomplete Lysis/Digestion	• Ensure Proteinase K digestions are performed at 55˚C as indicated. It is possible to extend digestion times for up to 24 hours if samples are high in protein. • Mix samples longer after the addition of Quick-DNA™ MagBinding Buffer to ensure that the lysate is homogenous.
Incomplete Debris Removal	• For solid tissue samples, ensure lysate is centrifuged after digestion to pellet insoluble debris. Transfer the supernatant while avoiding any pelleted debris or lipid layer.
DNase Contamination	• Check pipettes, pipette tips, 96-well plates, etc. for DNase contamination and exercise the appropriate precautions during the DNA purification procedure. All reagents and components supplied with the ***Quick*-DNA™ Magbead Plus Kit** are DNase-free. However, DNase contamination can result during the processing of some samples. • If water is used to elute the DNA, ensure that DNase-free water is used. • Certain samples are more prone to degradation as a result of the conditions used for storage and transport. • For solid tissue samples, ensure lysate is centrifuged after digestion to pellet insoluble debris. Transfer the supernatant while avoiding any pelleted debris or lipid layer.
Low DNA Performance	
Salt Contamination	• Ensure that pipette tips are switched out with each separate step of the protocol. • Ensure each mixing step is performed at the highest possible flow rate and is done as close to the bottom of the plate as possible.
RNA in Eluate	• For applications sensitive to trace amounts of RNA, additional RNA removal may be necessary using an RNase A treatment.
Tissue Input	• For low DNA-containing tissues (e.g. muscle, etc.) using larger inputs will increase yields (≥ 5mg). • If the lysate clogs the pipette tips or is extremely viscous, use less input material. Too much tissue can cause cellular debris to overload the tips or magbeads and leech salts into the DNA eluate.
Reduced DNA Yields	• When removing supernatant from the Magbinding Beads on the magnetic rack, use 300 µl tips and remove the supernatant using the slowest flow rate to avoid disrupting the bead pellet. • If Magbinding Beads do not resuspend properly during elution step, or yield is significantly decreased from expected, then reduce the amount of time spent drying the beads until issue is resolved. • Ensure complete mixing of the sample occurs in both the step after adding *Quick*-DNA™ MagBinding Buffer and after the addition of MagBinding Beads. • Ensure the buffers do not sit in the reagent troughs for extended periods of time (≥4 hours) before use in the protocol.
Platform does not Support Heat Block	• If platform does not have access to a heating block for drying of Magbinding Beads, an alternative elution step may be performed as follows: keep the pelleted beads on the magnetic stand, add 900 µl of **DNA Elution Buffer** to the wells, **DO NOT MIX**, and incubate for 1 minute. Remove the supernatant and proceed with the elution step of the protocol.

Ordering Information

Product Description	Catalog No.	Kit Size
***Quick*-DNA™ Midiprep Plus Kit**	D4075	25 preps.
***Quick*-DNA™ Miniprep Plus Kit**	D4068 D4069	50 preps. 200 preps.
***Quick*-DNA™ Microprep Plus Kit**	D4074	50 preps.
***Quick*-DNA™ 96 Plus Kit**	D4070 D4071	2 x 96 preps. 4 x 96 preps.
***Quick*-DNA™ Magbead Plus Kit**	D4081 D4082	1 x 96 preps. 4 x 96 preps.

For Individual Sale	Catalog No.	Amount
Proteinase K & Storage Buffer	D3001-2-5 D3001-2-20	5 mg set 20 mg set
Biofluid & Cell Buffer II	D4081-1-50 D4081-1-200	50 ml 200 ml
Solid Tissue Buffer II	D4081-2-6 D4081-2-22	6 ml 22 ml
***Quick*-DNA™ MagBinding Buffer**	D4077-1-150 D4077-1-250	150 ml 250 ml
DNA Pre-Wash Buffer	D3004-5-30 D3004-5-50 D3004-5-250	30 ml 50 ml 250 ml
g-DNA Wash Buffer	D3004-2-50 D3004-2-100 D3004-2-200	50 ml 100 ml 200 ml
DNA Elution Buffer	D3004-4-4 D3004-4-16 D3004-4-50	4 ml 16 ml 50 ml