

## Mag-Bind® Bacterial DNA 96 Kit

M2350-00	1 x 96 preps
M2350-01	4 x 96 preps

**Manual Date: June 2019**  
**Revision Number: v4.0**

**For Research Use Only**



# Mag-Bind® Bacterial DNA 96 Kit

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# Introduction and Overview

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## Introduction

The Mag-Bind® Bacterial DNA 96 Kit allows rapid and reliable isolation of high-quality genomic DNA (gDNA) from a wide variety of bacterial species. Up to 0.5 mL gram-positive or gram-negative bacterial culture can be processed each time. The key to the system is Omega Bio-tek's proprietary Mag-Bind® Particles CH that reversibly bind DNA under optimal conditions allowing proteins and other contaminants to be removed. DNA is easily eluted with deionized water or low salt buffer.

NOTE: Mag-Bind® Bacterial DNA Kit will isolate all cellular DNA, including plasmid DNA.

## Overview

If using the Mag-Bind® Bacterial DNA 96 Kit for the first time, please read this booklet to become familiar with the procedures. After bacterial cells are collected from culture or picked from an agar plate, the bacterial cell wall is removed by two digestion steps: first with lysozyme followed by proteinase k. After lysis, binding conditions are adjusted and the sample is mixed with Mag-Bind® Particles CH to bind the DNA. Two rapid wash steps remove trace salts and protein contaminants and DNA is eluted in water or low ionic strength buffer. Purified DNA can be used directly in downstream applications without the need for further purification.

### New in this Edition:

June 2019:

- SPM Wash Buffer has been renamed SPM Buffer. This is a name change only. The formulation has not changed.

September 2017:

- MB2 Buffer has been replaced with DS Buffer. This is a name change only. The formulation has not changed.

August 2015:

- Mag-Bind® Particles CND has been renamed as Mag-Bind® Particles CH. This is a name change only. The formulation has not changed.

## Kit Contents

Product	M2350-00	M2350-01
Purifications	1 x 96 preps	4 x 96 preps
Mag-Bind® Particles CH	1.1 mL	4.2 mL
MB1 Buffer	25 mL	100 mL
DS Buffer	3 mL	12 mL
MSL Buffer	25 mL	100 mL
SPM Buffer	30 mL	2 x 75 mL
Elution Buffer	30 mL	125 mL
Lysozyme	120 mg	480 mg
Proteinase K Solution	2.5 mL	10 mL
RNase A	550 µL	2.2 mL
User Manual	✓	✓

## Storage and Stability

All components of the Mag-Bind® Bacterial DNA 96 Kit are guaranteed for at least 12 months from the date of purchase when stored as follows. Store the Mag-Bind® Particles CH and RNase A at 2-8°C. Proteinase K Solution can be stored at room temperature for up to 12 months. For long-term storage (>12 months), store at 2-8°C. Once reconstituted, lysozyme must be stored at -20°C. Under cool ambient conditions, a precipitate may form in the MSL Buffer or DS Buffer. In case of such an event, heat the bottle at 37°C to dissolve.

## Preparing Reagents

1. Prepare a stock solution of Lysozyme (50 mg/mL) as follows and aliquot. Store each aliquot at -20°C and thaw before use.

Kit	Elution Buffer to be Added
M2350-00	2.4 mL
M2350-01	9.6 mL

2. Dilute SPM Buffer with 100% ethanol as follows:

Kit	100% Ethanol to be Added
M2350-00	70 mL
M2350-01	175 mL per bottle

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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## Mag-Bind® Bacterial DNA 96 Kit Protocol - DNA from Culture or Agar Plates

### Materials and Reagents to be Supplied by User:

- Centrifuge with rotor and adaptor for microplates
- Magnetic separation device compatible with plates used
- 1.2 or 2 mL deep-well plates
- Vortexer and sealing films
- 100% ethanol
- Multi-channel pipettor and tips
- Shaking water bath, incubator, or heat block capable of 37°C and 60°C
- Optional: Lysostaphin (1 mg/mL)

### Before Starting:

- Prepare SPM Buffer according to the Preparing Reagents Section on Page 4
- Prepare Lysozyme stock solutions according to the Preparing Reagents Section on Page 4
- Set incubator or heat block to 37°C
- Set incubator or heat block to 60°C

### 1. Preparing Cells

- Cells from Culture:
  1. Transfer 0.5 mL bacterial culture into each well of a 1.2 or 2 mL deep-well plate.
  2. Centrifuge at 4,000 x *g* at room temperature for 10 minutes.
  3. Carefully aspirate and discard the media without disturbing the cell pellet.
  4. Proceed to Step 2.
- Cells from an Agar Plate
  1. Add 90 µL MB1 Buffer and 10 µL Lysozyme into each well of the sample plate.
  2. Add one colony into each well and mix thoroughly.
  3. Proceed to Step 3.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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**Note:** If you choose to vortex the samples in during the protocol below, make sure to seal the plate completely to avoid any loss of sample or cross-contamination.

2. Add 90  $\mu$ L MB1 Buffer and 10  $\mu$ L Lysozyme. Mix the sample thoroughly by pipetting up and down 20 times. Make sure the cells are fully resuspended.

**Note:** For some species of staphylococci, add 1-2  $\mu$ L lysostaphin (1 mg/mL). Lysostaphin is not supplied.

3. Incubate at 37°C for 10 minutes. Mix the plate 1-2 times during incubation by vortexing or pipetting up and down 20 times.

**Note:** The amount of enzyme required and/or the incubation time may need to be modified depending on the bacterial strain used. Complete digestion of the cell wall is essential for efficient lysis. Longer incubation time might yield better results.

4. Add 12  $\mu$ L DS Buffer and 20  $\mu$ L Proteinase K Solution. Mix thoroughly by vortexing or pipetting up and down 20 times.

5. Incubate at 60°C in a shaking water bath for 20 minutes for gram-negative bacteria, or 40-60 minutes for gram-positive bacteria.

**Note:** Usually no more than 1 hour is needed for bacterial lysis. If a shaking water bath is not available, incubate and shake plate every 20-30 minutes.

6. Add 5  $\mu$ L RNase A. Mix thoroughly by vortexing or pipetting up and down 20 times.

7. Let sit at room temperature for 5 minutes.

8. Add 135  $\mu$ L MSL Buffer and 10  $\mu$ L Mag-Bind® Particles CH. Mix thoroughly by vortexing or pipetting up and down 20 times.

9. Add 182  $\mu$ L 100% ethanol. Mix thoroughly by vortexing or pipetting up and down 20 times.

10. Let sit at room temperature for 5 minutes.



# Mag-Bind® Bacterial DNA 96 Kit Protocol

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11. Place the plate on a magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit for 10-15 minutes.
12. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
13. Remove the plate from the magnetic separation device.
14. Add 400 µL SPM Buffer.  
  
**Note:** SPM Buffer must be diluted with 100% ethanol prior to use. Please see Page 4 for instructions.
15. Resuspend the Mag-Bind® Particles CH by vortexing or pipetting up and down 20 times. Incubate for 3 minutes at room temperature. Mix by vortexing or pipetting a few times during incubation.  
  
**Note:** Complete resuspension is required for adequate washing of the Mag-Bind® Particles CH.
16. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
17. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
18. Repeat Steps 13-17 for a second SPM Buffer wash step.
19. Leave the plate on the magnetic separation device for 5-10 minutes to air dry the Mag-Bind® Particles CH. Remove any residual liquid with a pipettor.
20. Remove the plate from the magnetic separation device.
21. Add 200 µL Elution Buffer. Resuspend the Mag-Bind® Particles CH by pipetting up and down 50 times or vortexing for 3 minutes.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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22. Let sit at room temperature for 5-10 minutes.

**Note:** Incubation at 60°C rather than at room temperature will give a modest increase in DNA yield per elution.

23. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
24. Transfer the cleared supernatant containing purified DNA to a clean plate. Store the DNA at -20°C.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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## Mag-Bind® Bacterial DNA 96 Kit Protocol - DNA from Viscous or Mucous Samples

### Materials and Reagents to be Supplied by User:

- Magnetic separation device compatible with plates used
- 1.2 or 2 mL deep-well plates
- Vortexer and sealing films
- 100% ethanol
- Multi-channel pipettor and tips
- Shaking water bath, incubator, or heat block capable of 37°C and 60°C
- DTT

### Before Starting:

- Prepare SPM Buffer according to the Preparing Reagents Section on Page 4
- Prepare Lysozyme stock solutions according to the Preparing Reagents Section on Page 4
- Prepare fresh 0.15% DTT (w/v) solution in MB1 Buffer just prior to DNA extraction
- Set incubator or heat block to 37°C
- Set incubator or heat block to 60°C

**Note:** If you choose to vortex the samples in during the protocol below, make sure to seal the plate completely to avoid any loss of sample or cross-contamination.

1. Add 200  $\mu$ L of sample into a 96-well deep-well plate (1.2 or 2 mL).
2. Add 200  $\mu$ L MB1 Buffer with freshly prepared DTT solution. Incubate at 37°C until the sample can be pipetted.
3. Transfer 200  $\mu$ L sample into a new deep-well plate.
4. Add 20  $\mu$ L Lysozyme to each sample.
5. Incubate at 37°C for 10 minutes.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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6. Add 25 µL DS Buffer and 20 µL Proteinase K Solution. Mix thoroughly by vortexing or pipetting up and down 20 times.
7. Incubate at 60°C in a shaking water bath for 20 minutes for gram-negative bacteria, or 40-60 minutes for gram-positive bacteria.  
  
**Note:** Usually no more than 1 hour is needed for bacterial lysis. If a shaking water bath is not available, incubate and shake plate every 20-30 minutes.
8. Add 5 µL RNase A. Mix thoroughly by vortexing or pipetting up and down 20 times.
9. Let sit at room temperature for 5 minutes.
10. Add 245 µL MSL Buffer and 10 µL Mag-Bind® Particles CH. Mix thoroughly by vortexing or pipetting up and down 20 times.
11. Add 330 µL 100% ethanol. Mix thoroughly by vortexing or pipetting up and down 20 times.
12. Transfer half of the sample volume into a round-bottom 96-well plate.
13. Place the plate on a magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit for 10-15 minutes.
14. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
15. Repeat Steps 12-14 until all of the Mag-Bind® Particles CH from the samples are collected.
16. Remove the plate from the magnetic separation device.
17. Add 400 µL SPM Buffer.

**Note:** SPM Buffer must be diluted with 100% ethanol prior to use. Please see Page 4 for instructions.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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18. Resuspend the Mag-Bind® Particles CH by vortexing or pipetting up and down 20 times.

**Note:** Complete resuspension is required for adequate washing of the Mag-Bind® Particles CH.

19. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
20. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
21. Repeat Steps 16-20 for a second SPM Buffer wash step.
22. Leave the plate on the magnetic separation device for 5-10 minutes to air dry the Mag-Bind® Particles CH. Remove any residual liquid with a pipettor.
23. Remove the plate from the magnetic separation device.
24. Add 200 µL Elution Buffer. Resuspend the Mag-Bind® Particles CH by pipetting up and down 50 times or vortexing for 3 minutes.
25. Let sit at room temperature for 5-10 minutes.

**Note:** Incubation at 60°C rather than at room temperature will give a modest increase in DNA yield per elution.
26. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
27. Transfer the cleared supernatant containing purified DNA to a clean plate. Store the DNA at -20°C.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

## Mag-Bind® Bacterial DNA 96 Kit Protocol - DNA from Urine

### Materials and Reagents to be Supplied by User:

- Centrifuge with rotor and adaptor for microplates
- Magnetic separation device compatible with plates used
- 1.2 or 2 mL deep-well plates
- Vortexer and sealing films
- 100% ethanol
- Multi-channel pipettor and tips
- Shaking water bath, incubator, or heat block capable of 37°C and 60°C
- Optional: Lysostaphin (1 mg/mL)

### Before Starting:

- Prepare SPM Buffer according to the Preparing Reagents Section on Page 4
- Prepare Lysozyme stock solutions according to the Preparing Reagents Section on Page 4
- Set incubator or heat block to 37°C
- Set incubator or heat block to 60°C

**Note:** If you choose to vortex the samples in during the protocol below, make sure to seal the plate completely to avoid any loss of sample or cross-contamination.

1. Add 1 mL urine into each well of a 1.2 or 2 mL deep-well plate.
2. Centrifuge at 3,000 x *g* for 5 minutes.
3. Carefully aspirate and discard the supernatant.
4. Add 200 µL MB1 Buffer. Resuspend the pellet by vortexing for 20 seconds.
5. Add 20 µL Lysozyme.

**Note:** For some species of staphylococci, add 1-2 µL Lysostaphin (1 mg/mL). Lysostaphin is not supplied.

6. Incubate at 37°C for 10 minutes.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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7. Add 25 µL DS Buffer and 20 µL Proteinase K Solution. Mix thoroughly by vortexing or pipetting up and down 20 times.
8. Incubate at 60°C in a shaking water bath for 20 minutes for gram-negative bacteria, or 40-60 minutes for gram-positive bacteria.

**Note:** Usually no more than 1 hour is needed for bacterial lysis. If a shaking water bath is not available, incubate and shake plate every 20-30 minutes.

9. Add 5 µL RNase A. Mix thoroughly by vortexing or pipetting up and down 20 times.
10. Let sit at room temperature for 5 minutes.
11. Add 245 µL MSL Buffer and 10 µL Mag-Bind® Particles CH. Mix thoroughly by vortexing or pipetting up and down 20 times.
12. Add 330 µL 100% ethanol. Mix thoroughly by vortexing or pipetting up and down 20 times.
13. Transfer half of the sample volume into a round-bottom 96-well plate.
14. Place the plate on a magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit for 10-15 minutes.
15. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
16. Repeat Steps 13-15 until all of the Mag-Bind® Particles CH from the samples are collected.
17. Remove the plate from the magnetic separation device.
18. Add 400 µL SPM Buffer.

**Note:** SPM Buffer must be diluted with 100% ethanol prior to use. Please see Page 4 for instructions.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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19. Resuspend the Mag-Bind® Particles CH by vortexing or pipetting up and down 20 times.

**Note:** Complete resuspension is required for adequate washing of the Mag-Bind® Particles CH.

20. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.

21. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.

22. Repeat Steps 17-21 for a second SPM Buffer wash step.

23. Leave the plate on the magnetic separation device for 5-10 minutes to air dry the Mag-Bind® Particles CH. Remove any residual liquid with a pipettor.

24. Remove the plate from the magnetic separation device.

25. Add 200 µL Elution Buffer. Resuspend the Mag-Bind® Particles by pipetting up and down 50 times or vortexing for 3 minutes.

26. Let sit at room temperature 5-10 minutes.

**Note:** Incubation at 60°C rather than at room temperature will give a modest increase in DNA yield per elution.

27. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.

28. Transfer the cleared supernatant containing purified DNA to a clean plate. Store the DNA at -20°C.



# Mag-Bind® Bacterial DNA 96 Kit Protocol

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## Mag-Bind® Bacterial DNA 96 Kit Protocol - DNA from Body Fluids

### Materials and Reagents to be Supplied by User:

- Centrifuge with rotor and adaptor for microplates
- Magnetic separation device compatible with plates used
- 1.2 or 2 mL deep-well plates
- Vortexer and sealing films
- 100% ethanol
- Multi-channel pipettor and tips
- Shaking water bath, incubator, or heat block capable of 37°C and 60°C
- Optional: Lysostaphin (1 mg/mL)

### Before Starting:

- Prepare SPM Buffer according to the Preparing Reagents Section on Page 4
- Prepare Lysozyme stock solutions according to the Preparing Reagents Section on Page 4
- Set incubator or heat block to 37°C
- Set incubator or heat block to 60°C

**Note:** If you choose to vortex the samples in during the protocol below, make sure to seal the plate completely to avoid any loss of sample or cross-contamination.

1. Add 100 µL sample into each well of a 1.2 or 2 mL deep-well plate.
2. Add 100 µL MB1 Buffer. Mix thoroughly by vortexing or pipetting up and down 20 times.
3. Add 20 µL Lysozyme and incubate at 37°C for 10 minutes.

**Note:** For some species of staphylococci, add 1-2 µL Lysostaphin (1 mg/mL). Lysostaphin is not supplied.

4. Add 25 µL DS Buffer and 20 µL Proteinase K Solution. Mix thoroughly by vortexing or pipetting up and down 20 times.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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5. Incubate at 60°C in a shaking water bath for 20 minutes for gram-negative bacteria, or 40-60 minutes for gram-positive bacteria.

**Note:** Usually no more than 1 hour is needed for bacterial lysis. If a shaking water bath is not available, incubate and shake plate every 20-30 minutes.

6. Add 5 µL RNase A. Mix thoroughly by vortexing or pipetting up and down 20 times.
7. Let sit at room temperature for 5 minutes.
8. Add 245 µL MSL Buffer and 10 µL Mag-Bind® Particles CH. Mix thoroughly by vortexing or pipetting up and down 20 times.
9. Add 330 µL 100% ethanol. Mix thoroughly by vortexing or pipetting up and down 20 times.
10. Transfer half of the sample volume into a round-bottom 96-well plate.
11. Place the plate on a magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit for 10-15 minutes.
12. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
13. Repeat Steps 10-12 until all of the Mag-Bind® Particles CH from the samples are collected.
14. Remove the plate from the magnetic separation device.
15. Add 400 µL SPM Buffer.

**Note:** SPM Buffer must be diluted with 100% ethanol prior to use. Please see Page 4 for instructions.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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16. Resuspend the Mag-Bind® Particles CH by vortexing or pipetting up and down 20 times.

**Note:** Complete resuspension is required for adequate washing of the Mag-Bind® Particles CH.

17. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
18. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
19. Repeat Steps 14-18 for a second SPM Buffer wash step.
20. Leave the plate on the magnetic separation device for 5-10 minutes to air dry the Mag-Bind® Particles CH. Remove any residual liquid with a pipettor.
21. Remove the plate from the magnetic separation device.
22. Add 200 µL Elution Buffer. Resuspend the Mag-Bind® Particles by pipetting up and down 50 times or vortexing for 3 minutes.
23. Let sit at room temperature for 5-10 minutes.

**Note:** Incubation at 60°C rather than at room temperature will give a modest increase in DNA yield per elution.

24. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.
25. Transfer the cleared supernatant containing purified DNA to a clean plate. Store the DNA at -20°C.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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## Mag-Bind® Bacterial DNA 96 Kit Protocol - DNA from Secretion Swabs (buccal or nasal swab)

### Materials and Reagents to be Supplied by User:

- Centrifuge with rotor and adaptor for microplates
- Magnetic separation device compatible with plates used
- 1.2 or 2 mL deep-well plates
- Vortexer and sealing films
- 100% ethanol
- Multi-channel pipettor and tips
- Shaking water bath, incubator, or heat block capable of 37°C and 60°C
- Optional: Lysostaphin (1 mg/mL)

### Before Starting:

- Prepare SPM Buffer according to the Preparing Reagents Section on Page 4
- Prepare Lysozyme stock solutions according to the Preparing Reagents Section on Page 4
- Set incubator or heat block to 37°C
- Set incubator or heat block to 60°C

**Note:** If you choose to vortex the samples in during the protocol below, make sure to seal the plate completely to avoid any loss of sample or cross-contamination.

1. Add 280  $\mu$ L MB1 Buffer in each well of a 1.2 or 2 mL deep-well plate.
2. Submerge a swab tip into each well.
3. Add 20  $\mu$ L Lysozyme to each sample and incubate at 37°C for 10 minutes.

**Note:** For some species of staphylococci, add 1-2  $\mu$ L Lysostaphin (1 mg/mL). Lysostaphin is not supplied.

4. Transfer 200  $\mu$ L sample into a new deep-well plate.
5. Add 25  $\mu$ L DS Buffer and 20  $\mu$ L Proteinase K Solution. Mix thoroughly by vortexing or pipetting up and down 20 times.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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6. Incubate at 60°C in a shaking water bath for 20 minutes for gram-negative bacteria, or 40-60 minutes for gram-positive bacteria.

**Note:** Usually no more than 1 hour is needed for bacterial lysis. If a shaking water bath is not available, incubate and shake plate every 20-30 minutes.

7. Add 5 µL RNase A. Mix thoroughly by vortexing or pipetting up and down 20 times.
8. Let sit at room temperature for 5 minutes.
9. Add 245 µL MSL Buffer and 10 µL Mag-Bind® Particles CH. Mix thoroughly by vortexing or pipetting up and down 20 times.
10. Add 330 µL 100% ethanol. Mix thoroughly by vortexing or pipetting up and down 20 times.
11. Transfer half of the sample volume into a round-bottom 96-well plate.
12. Place the plate on a magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit for 10-15 minutes.
13. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.
14. Repeat Steps 11-13 until all of the Mag-Bind® Particles CH from the samples are collected.
15. Remove the plate from the magnetic separation device.
16. Add 400 µL SPM Buffer.

**Note:** SPM Buffer must be diluted with 100% ethanol prior to use. Please see Page 4 for instructions.

# Mag-Bind® Bacterial DNA 96 Kit Protocol

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17. Resuspend the Mag-Bind® Particles CH by vortexing or pipetting up and down 20 times.

**Note:** Complete resuspension is required for adequate washing of the Mag-Bind® Particles CH.

18. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.

19. Aspirate and discard the supernatant. Do not disturb the Mag-Bind® Particles CH.

20. Repeat Steps 15-19 for a second SPM Buffer wash step.

21. Leave the plate on the magnetic separation device for 5-10 minutes to air dry the Mag-Bind® Particles CH. Remove any residual liquid with a pipettor.

22. Remove the plate from the magnetic separation device.

23. Add 200 µL Elution Buffer. Resuspend the Mag-Bind® Particles by pipetting up and down 50 times or vortexing for 3 minutes.

24. Let sit at room temperature for 5-10 minutes.

**Note:** Incubation at 60°C rather than at room temperature will give a modest increase in DNA yield per elution.

25. Place the plate on the magnetic separation device to magnetize the Mag-Bind® Particles CH. Let sit at room temperature until the Mag-Bind® Particles CH are completely cleared from solution.

26. Transfer the cleared supernatant containing purified DNA to a clean plate. Store the DNA at -20°C.

# Troubleshooting Guide

Please use this guide to troubleshoot any problems that may arise. For further assistance, please contact the technical support staff, toll free, at **1-800-832-8896**.

Problem	Cause	Solution
Low DNA yields	Incomplete resuspension of Mag-Bind® Particles CH	Resuspend the Mag-Bind® Particles CH by vortexing before use
	Inefficient cell lysis	<ul style="list-style-type: none"> <li>• Increase the Lysozyme incubation time</li> <li>• Increase the Proteinase K digestion time</li> </ul>
	SPM Buffer is not prepared correctly	Prepare the SPM Buffer by adding 100% ethanol according to the instructions
	Loss of Mag-Bind® Particles CH during operation	Do not aspirate the Mag-Bind® Particles CH during pipetting
No DNA eluted	SPM Buffer not diluted with ethanol	Prepare the SPM Buffer by adding ethanol according to the instructions
Problem with downstream applications	Ethanol carry over	Make sure to remove all SPM Buffer during the Mag-Bind® Particles CH drying step

## Ordering Information

The following components are available for purchase separately.

**Call Toll Free at 1-800-832-8896**

Product	Part Number
Elution Buffer, 100 mL	PDR048
Elution Buffer, 500 mL	PD089
MSL Buffer, 100 mL	PD070
SPM Buffer, 40 mL	PS014
RNase A, 400 µL	AC117
RNase A, 5 mL	AC118
Sealing Film	AC1200
Proteinase K Solution	AC116

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PCR is a patented process of Hoffman-La Roche. Use of the PCR process requires a license.



**Notes:**

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**Notes:**



For more purification solutions, visit [www.omegabiotek.com](http://www.omegabiotek.com)

## AVAILABLE FORMATS



Spin Columns



96-Well  
Silica Plates



Mag Beads

## SAMPLE TYPES



Blood / Plasma



Plasmid



Cultured Cells



Plant & Soil



NGS Clean Up



Tissue



FFPE








Fecal Matter






**BIO-TEK**

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