

# PrepSEQ™ Rapid Spin Sample Preparation Kits

**Note:** For safety and biohazard guidelines, refer to the “Safety” appendix in the *PrepSEQ™ Rapid Spin Sample Preparation Kits Protocol* (PN 4412847). For all chemicals in **bold red** type, read the MSDS and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

## Product overview

The PrepSEQ™ Rapid Spin Sample Preparation Kits provide a simple way to prepare DNA from *broth* cultures. The PrepSEQ™ Rapid Spin Extra Clean Kits are recommended for foods with a high lipid content. The PrepSEQ™ Rapid Spin Sample Preparation Kits with Proteinase K are recommended for the detection of difficult-to-lyse bacteria, such as *Listeria* spp.

## Kit contents

The PrepSEQ™ Rapid Spin Sample Preparation Kits contain reagents for 100 sample preparations. Kit components are shown in the table below. For more information on the kit contents, refer to the “Materials supplied” section in the packaging insert for your kit.

Kit	Item	Quantity or volume
<b>Kits without Proteinase K</b>		
PrepSEQ™ Rapid Spin Sample Preparation Kit (PN 4407760)	Spin columns	100
	Microcentrifuge tubes, 1.5 mL	100
	Lysis Buffer, 1 bottle	5 mL
PrepSEQ™ Rapid Spin Sample Preparation Kit – Extra Clean (PN 4413269)	Spin columns	100
	Microcentrifuge tubes, 1.5 mL	2 × 100
	Lysis Buffer, 1 bottle	5 mL
<b>Kits with Proteinase K for difficult-to-lyse bacteria<sup>‡</sup></b>		
PrepSEQ™ Rapid Spin Sample Preparation Kit with Proteinase K (PN 4426714)	Spin columns	100
	Microcentrifuge tubes, 1.5 mL	100
	Lysis Buffer, 1 bottle	5 mL
	<b>Proteinase K<sup>‡</sup></b> (20 mg/mL), 1 tube	1.25 mL
PrepSEQ™ Rapid Spin Sample Preparation Kit – Extra Clean with Proteinase K (PN 4426715)	Spin columns	100
	Microcentrifuge tubes, 1.5 mL	2 × 100
	Lysis Buffer, 1 bottle	5 mL
	<b>Proteinase K<sup>‡</sup></b> (20 mg/mL), 1 tube	1.25 mL

<sup>‡</sup> for use with the protocol for difficult-to-lyse bacteria, such as *Listeria* spp.

**Note:** Parts may ship separately depending on the configuration ordered and storage conditions.

## Storage

- Store Proteinase K at –20 °C.
- Store Lysis Buffer at 4 °C.
- Store spin columns and tubes at room temperature (22 to 28 °C).

For information on storage of individual kit components, refer to the “Storage” section in the packaging insert for your kit.

## Overview

The PrepSEQ™ Rapid Spin Sample Preparation Kits are designed to work with most food types. The kit procedure involves:

- Sample enrichment
- Sample preparation

For the detection of most food-borne pathogens, use the [“Kit workflow using the general sample preparation protocol” on page 3](#).

For the detection of difficult-to-lyse bacteria (for example, *Listeria* spp.), use the [“Kit workflow using the sample preparation protocol for difficult-to-lyse bacteria” on page 4](#).

For sample preparation from enriched food samples, Applied Biosystems recommends a 750-µL sample volume.

For some foods with a high lipid content, such as baby formula and chicken wing samples, the PrepSEQ™ Rapid Spin Extra Clean protocol is recommended.

For information on preparing:

- *Salmonella* spp. DNA from food samples, refer to the *PrepSEQ™ Rapid Spin Sample Preparation Kit Protocol: Salmonella* spp. (PN 4412848)
- *Listeria monocytogenes* DNA from food samples, refer to the *PrepSEQ™ Rapid Spin Sample Preparation Kit Protocol: Listeria monocytogenes* (PN 4412851)

## Before you begin

Before starting your sample extraction:

- If you are using the general sample preparation protocol:
  - Set the block heater temperature to 95 °C.
  - Label 1.5-mL microcentrifuge tubes.
- If you are using the sample preparation protocol for difficult-to-lyse bacteria:
  - Set one block heater temperature to 95 °C, and the other block heater temperature to 56 °C.
  - Label 1.5-mL microcentrifuge tubes.
  - Prepare Proteinase K-Lysis Buffer mix: premix 5 µL of Proteinase K (20 mg/mL) with 50 µL of Lysis Buffer for each sample (use a clean appropriately-sized container for mixing). Multiply volumes by the number of samples plus one for overage. Mix well to disperse Proteinase K in Lysis Buffer. Store on ice until ready to use.

## Kit workflow using the general sample preparation protocol

The figure below shows a sample processing workflow based on the general sample preparation protocol.

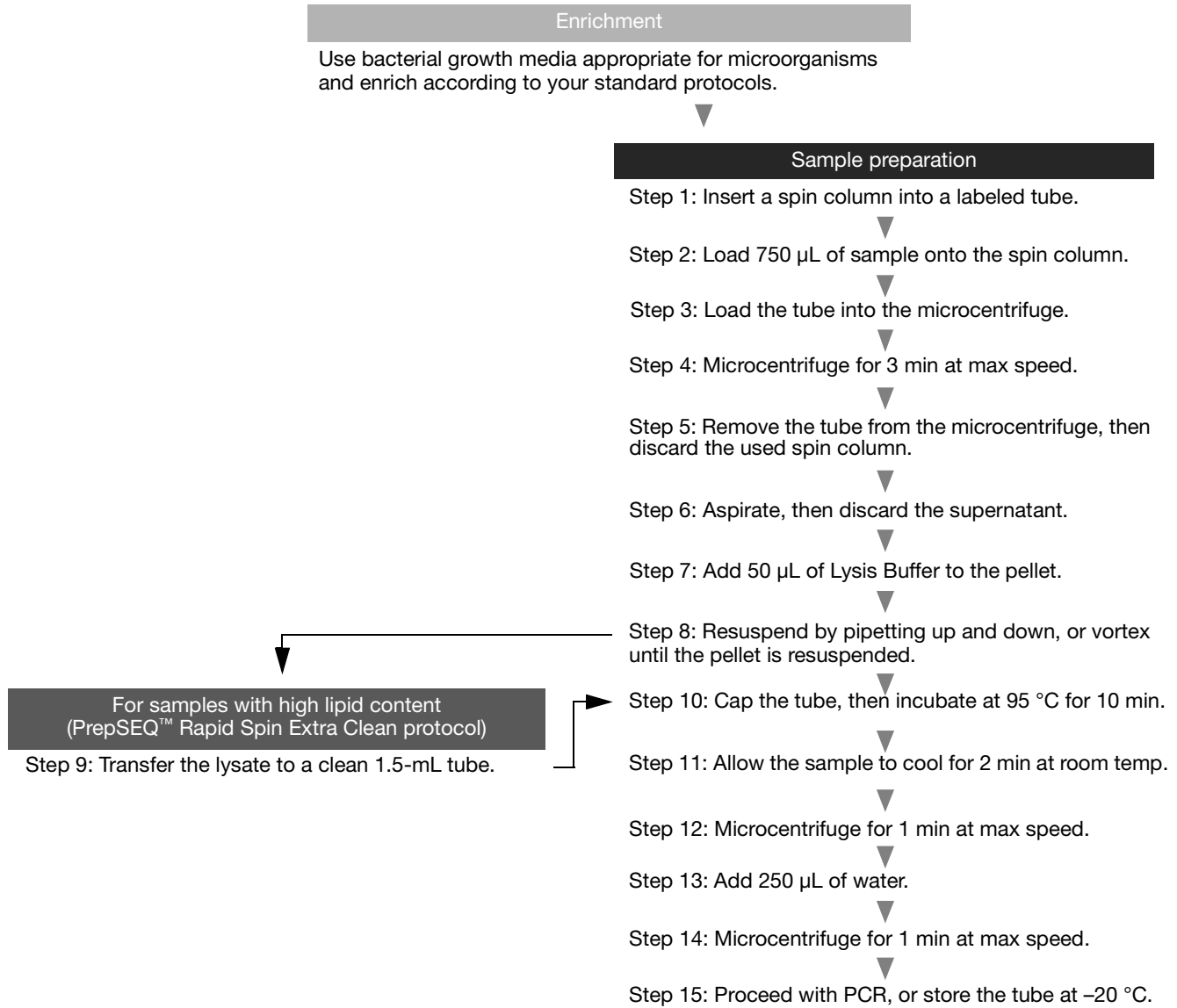
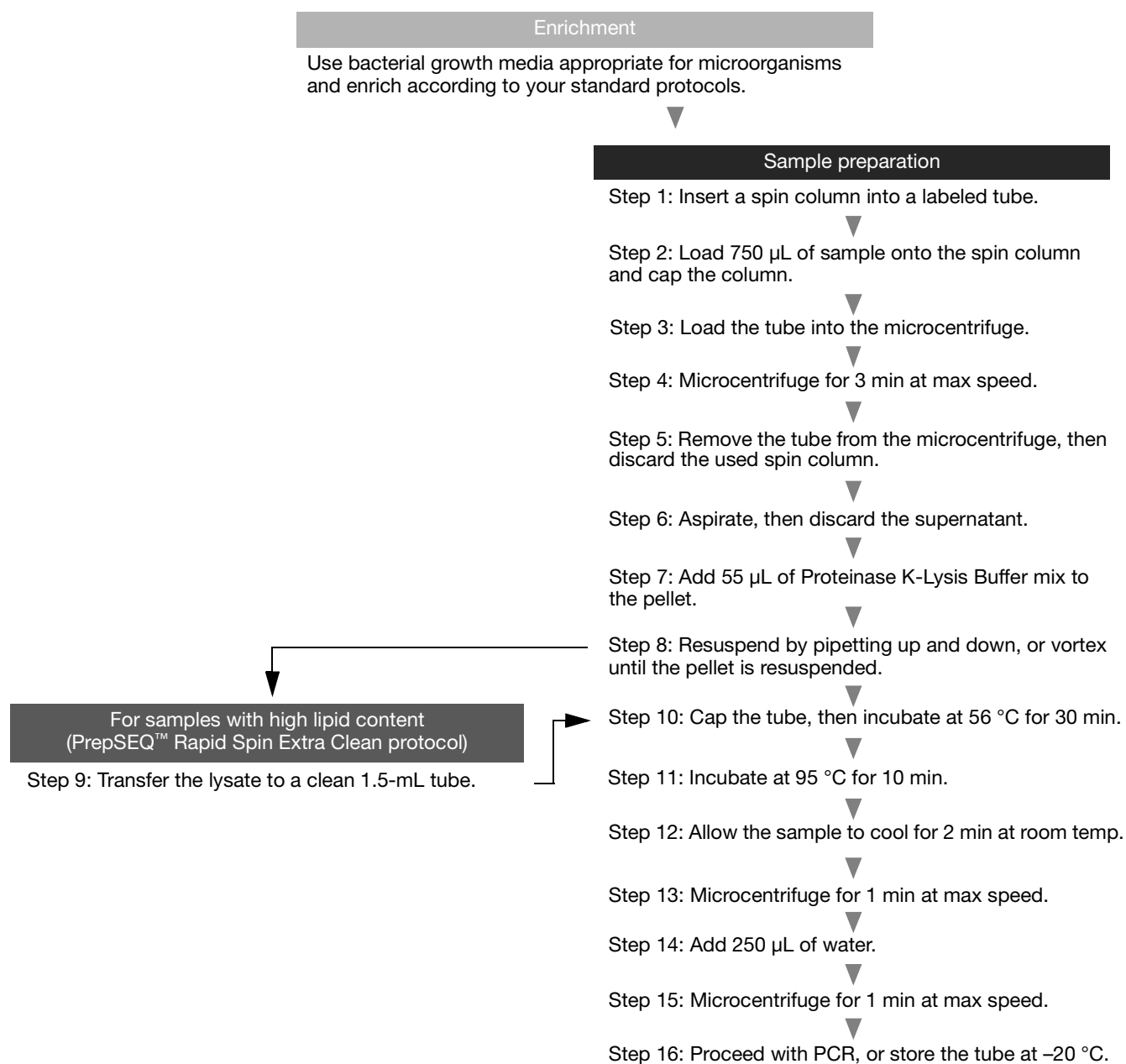


Figure 1 Food sample preparation using the PrepSEQ™ Rapid Spin Sample Preparation Kit general protocol

## Kit workflow using the sample preparation protocol for difficult-to-lyse bacteria

The figure below shows a sample processing workflow based on the sample preparation protocol for difficult-to-lyse bacteria, such as *Listeria* spp.



**Figure 2** Food sample preparation using the PrepSEQ™ Rapid Spin Sample Preparation Kit protocol for difficult-to-lyse bacteria

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