

foodproof®

# StarPrep One

# 8-Strip Kit

High-Throughput

# MANUAL

Documentation for the high-throughput extraction of DNA  
from gram-negative bacteria for direct use in PCR

Order No. S 400 14 L

**foodproof®**  
**StarPrep One 8-Strip Kit**  
High-Throughput

Store kit at 15 °C to 25 °C  
FOR *IN VITRO* USE ONLY

Order No. S 400 14 L  
Kit for 480 reactions

**Manual:**  
Version 4, April 2021

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## 1. OVERVIEW

# 1. OVERVIEW

The **foodproof**<sup>®</sup> StarPrep One 8-Strip Kit is designed for the rapid extraction of DNA from bacteria like *Salmonella* or *Cronobacter* for direct use in PCR. Up to 96 samples can be processed in parallel. The kit generates PCR template DNA from up to 100 µl (or more) of enrichment culture. For testing with a high background of dead bacteria, an additional live-dead treatment with Reagent D can be performed.

The extracted DNA can be used directly in any PCR application. The StarPrep One Lysis Buffer eliminates the need for hazardous organic extractions or chaotropic agents. The entire DNA preparation can be performed in a single tube, minimizing handling steps and exposure to hazardous material. The reduced number of handling steps saves time. Transfer steps of DNA-containing extracts are not necessary, thus cross-contamination risks are minimized.

## 1.1. General Information

### Number of Reactions

The kit is designed for 480 reactions.

### Storage Conditions

Store at 15 to 25 °C.

The components of the **foodproof**<sup>®</sup> StarPrep One 8-Strip Kit are guaranteed to be stable through the expiration date printed on the label.

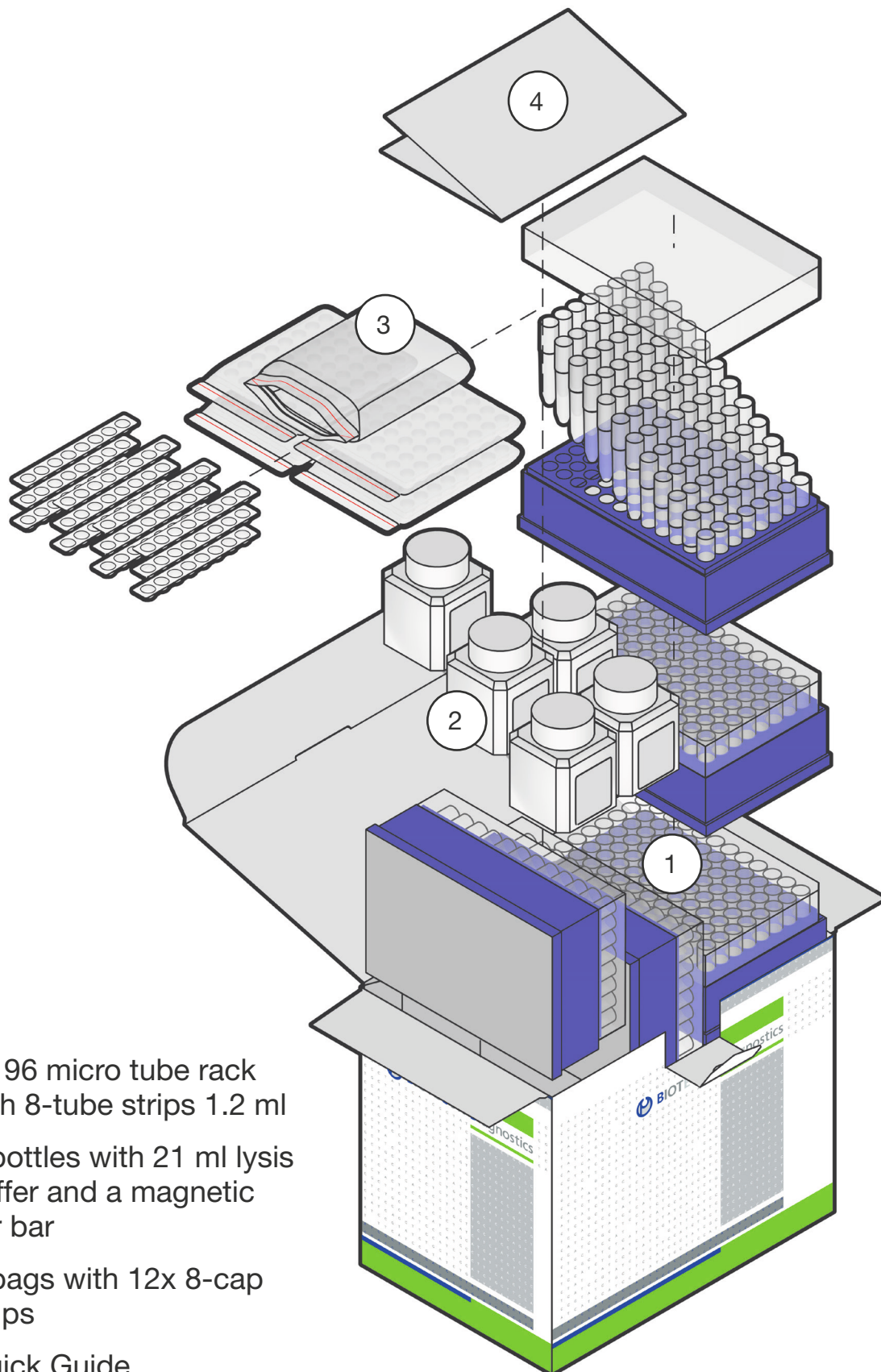
## 1.2. Applicability

The lysis buffer can be used to prepare DNA from a 100 µl (or more) sample. The lysis buffer is optimized for the preparation of various types of sample material. The quality of the DNA obtained with the lysis buffer is suitable for any PCR application.

## 1. OVERVIEW

### 1.3. Kit Contents

A schematic representation of the **foodproof®** StarPrep One 8-Strip Kit with all components:



1. 5x 96 micro tube rack with 8-tube strips 1.2 ml
2. 5 bottles with 21 ml lysis buffer and a magnetic stir bar
3. 5 bags with 12x 8-cap strips
4. Quick Guide

## 2. INSTRUCTIONS

# 2. INSTRUCTIONS

This section provides all information for a straightforward DNA extraction from a variety of different food matrices.

## 2.1. Required Material

Most of the required equipment and reagents are available through BIOTECON Diagnostics. Please contact us for further information. To place an order, please call +49 (0) 331 2300 200 or send an email to [order@bc-diagnostics.com](mailto:order@bc-diagnostics.com).



*It is highly recommended to only use the materials described below to ensure the performance of the method.*

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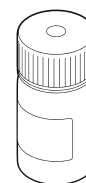
### Reagents

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**Reagent D**

Order No. A 500 02

only for procedure D (2.3.4.)




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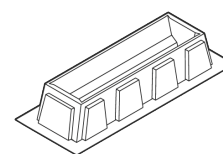
### Consumables

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**Sterile reservoir**

25 ml (Order No. Z 100 60)

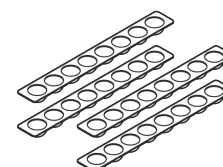
100 ml (Order No. Z 100 62)



**8-Cap strips for micro tube rack**

Order No. Z 100 73

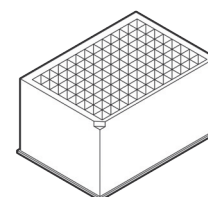
for procedures A, B and D



**Deep well plate, 96 well, square well, PP, 1 ml**

Order No. Z 101 60

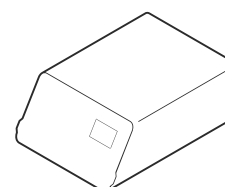
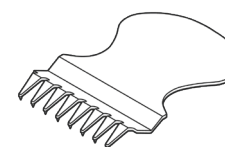
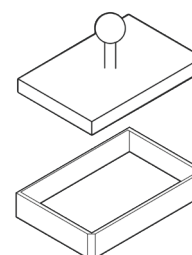
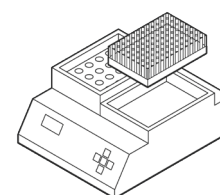
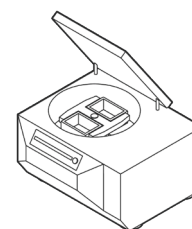
only for procedure D (2.3.4.)



## 2. INSTRUCTIONS

### Equipment

- Multichannel pipette** and filter tips  
 e.g. 8-Channel Pipette VIAFLO - INTEGRA Biosciences  
 (Order No. D 111 43);  
 GripTips: 50 to 1,250  $\mu$ l (Order No. Z 111 33)  
 or EP Xplorer Plus Electronic Multichannel Pipette  
 (Order No. D 110 40);  
 Filter Tips: 50 to 1,250  $\mu$ l (Order No. Z 100 58)
- Centrifuge** with swing-out rotor for microtiter plates capable of a  $> 5,400 \times g$  centrifugal force  
 e.g. Sigma 4-16S including rotor (Order No. D 110 90.1 - D 110 91)  
 Or **centrifuge** with swing-out rotor for microtiter plates capable of a  $2,000 \times g$  centrifugal force  
 e.g. Sigma 2-7 including rotor (Order No. D 110 97 - D110 97.1)
- TH 21 heating block thermostat**  
 Order No. D 110 38
- Exchange block for deepwell plates for TH 21  
 Order No. D 110 39
- Lid weight** with **incubation frame** for TH 21 heating block thermostat  
 Order No. Z 100 96.1
- Decapper 8-strip**  
 Order No. Z 100 77
- D-Light**  
 Order No. D 110 45



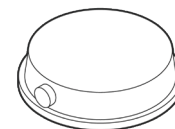
only for procedure D (2.3.4.)

## 2. INSTRUCTIONS

### Recommended:

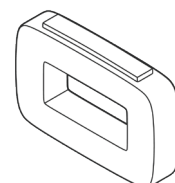
**Magnetic stirrer**

*e.g. color squid wave - IKA®-Werke (Order No. D 110 27)*



**Cap installing tool**

*Order No. Z 100 76*

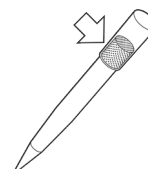


## 2.2. Precautions and Preparations

Follow all universal safety precautions governing work with biohazardous materials, e.g. wear lab coats and gloves at all times. Properly dispose of all contaminated materials, decontaminate work surfaces, and use a biosafety cabinet whenever aerosols might be generated.

For more information, please refer to the appropriate material safety data sheet (MSDS). The MSDS is available online at [www.bc-diagnostics.com](http://www.bc-diagnostics.com).

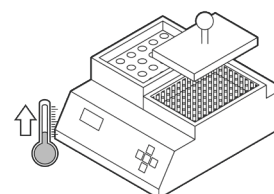
- Always use filter tips in order to avoid cross-contamination.



- To avoid foam formation of the lysis buffer, do not shake the bottles up and down. Mix thoroughly while pipetting the buffer for sample preparation. For mixing, use a magnetic stirrer at low speed to move the stir bar in the bottle or shake the bottle before every pipetting step by moving it horizontally on the lab bench.

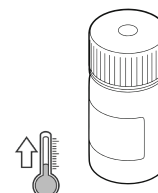


- To reach the required temperature of 95 - 100 °C in the tubes for the lysis step of the bacteria, the temperature of the corresponding **heating unit TH 21 has to be set to 100 °C**.



- Thaw the Reagent D prior to use.

Avoid more than three freeze-thaw cycles. If necessary, aliquots can be prepared and stored according to the Reagent D manual. Avoid extended exposure to light.



only for procedure D (2.3.4.)



## 2. INSTRUCTIONS

### 2.3. Workflows

The following procedures describe the DNA isolation from enrichment culture using 8-strip tubes and multichannel pipettes. Procedure A (PCR Lyo) and B (PCR Liquid) are more sensitive protocols, where two different extraction methods are provided depending on which kind of PCR kit is used for downstream processing (for lyophilized reagents: see PCR Lyo, for liquid reagents: see PCR Liquid). Procedure C (Rapid) is the fastest protocol suitable for less difficult matrices like milk powder. Procedure D (Live/Dead) contains a step for live and dead differentiation.

## 2.3.1. EXTRACTION PROCEDURE A: PCR LYO

### 2.3.1. EXTRACTION PROCEDURE A: PCR LYO

This protocol is intended for extracts that will be used in combination with **foodproof®** LyoKits.

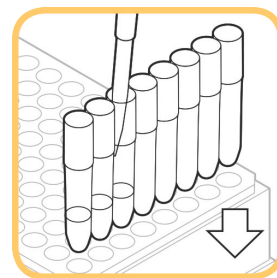
#### 1. SHAKE SAMPLE

Shake enrichment culture gently and let suspension settle for 5 to 10 min.



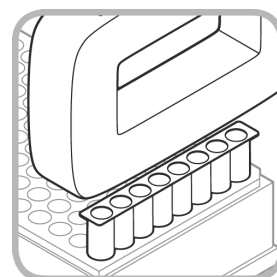
#### 2. ADD SAMPLE

Transfer at least **100 µl** sample (enrichment culture supernatant) to the 8-tube strips.



#### 3. SEAL TUBES

Seal the tubes with sterile cap strips.

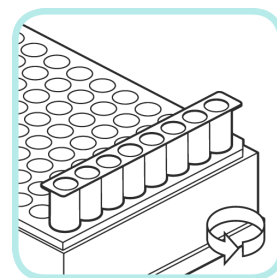


#### 4. CENTRIFUGE RACK

**10 min at 5,400 x g** (or 25 min at 2,000 x g).

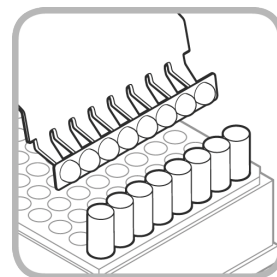
Make sure the rack is not sealed with rack lid during centrifugation.

*Note: Time and g-force depend on the centrifuge (please see 2.1. Required Material for more information). Set the centrifuge acceleration to maximum speed and the brake to medium. If necessary, centrifugation forces should be calculated according to the manual of the used centrifuge.*



#### 5. REMOVE CAPS

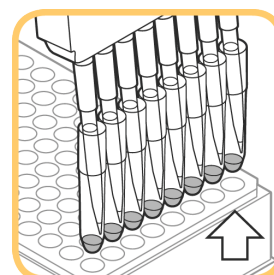
Remove and discard the 8-cap strips from the 8-tube strips. To minimize the contamination risk, use the decapper 8-strip tool.



### 2.3.1. EXTRACTION PROCEDURE A: PCR LYO

## 6. REMOVE SUPERNATANT

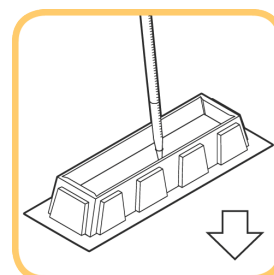
Remove supernatant with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately. Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



## 7. PREPARE LYSIS BUFFER

**Dilute** the needed lysis buffer **2:1 with sterile ddH<sub>2</sub>O** in a sterile reservoir: 200 µl lysis buffer + 100 µl H<sub>2</sub>O per sample plus 1 ml lysis buffer as dead volume.

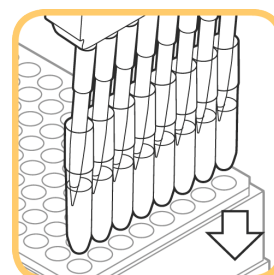
*Note: Use a magnetic stirrer (low speed) or shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.*



## 8. ADD LYSIS BUFFER

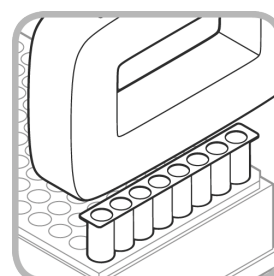
Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients. Transfer **300 µl** diluted lysis buffer with a multichannel pipette to each tube. **Resuspend pellets** by pipetting up and down 5 to 10 times.

*Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended.*



## 9. SEAL TUBES

Seal the tubes **tightly** with new sterile cap strips.



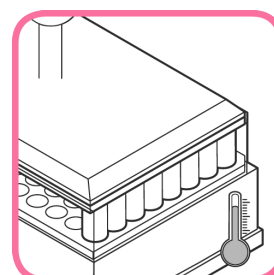
## 10. INCUBATE

**Remove tube rack bottom and install incubation frame.**

Incubate rack with tube stripes **10 - 15 min at 100 °C** in TH 21 Heating Block for 8-tube strips.

Weight caps down with the lid weight.

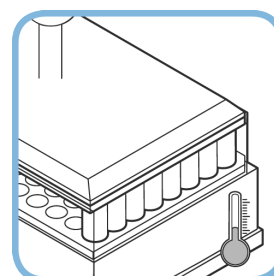
*Note: To avoid removing and reinstalling the bottom, it is possible to place tube stripes in an empty micro tube rack (with rack bottom removed).*



## 11. CHILL

Carefully **remove** the rack with the **tube strips together with the lid weight** from the heating unit and let it **cool 3 - 5 min at room temperature**.

To avoid opening of caps, do not remove the lid weight until the strips have cooled down.

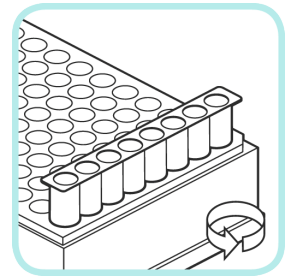


**2.3.1. EXTRACTION PROCEDURE A: PCR LYO**

## 12. CENTRIFUGE RACK

**Reinstall tube rack bottom.**

Centrifuge **5 min at 5,400 x g** (or 10 min at 2,000 x g).  
Make sure the rack is not sealed with rack lid during centrifugation.



## SUPERNATANT FOR DETECTION

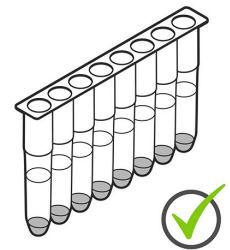
**Use up to 25 µl of the extract for the respective foodproof® PCR kit.**

*Note: Strictly avoid transferring fractions of the sediment to the PCR reaction, because this might cause PCR inhibition.*

**For analysis later on, store DNA at -15 to -25 °C.**

After thawing, mix briefly by vortexing and centrifuge at 2,000 x g for 5 min.

*Note: The sample is not purified. Proteins, RNA, and other materials remain in the sample. Long-term storage or archiving of prepared DNA samples is not recommended.*



## 2.3.2. EXTRACTION PROCEDURE B: PCR LIQUID

### 2.3.2. EXTRACTION PROCEDURE B: PCR LIQUID

This protocol is intended for extracts that will be used in combination with **foodproof®** kits (liquid).

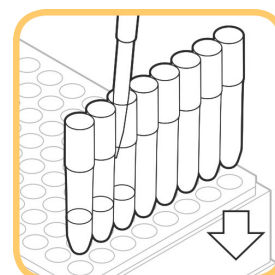
#### 1. SHAKE SAMPLE

Shake enrichment culture gently and let suspension settle for 5 to 10 min.



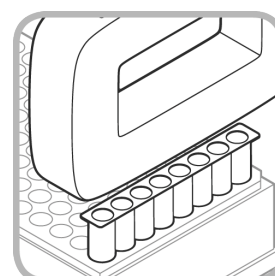
#### 2. ADD SAMPLE

Transfer at least **100 µl** sample (enrichment culture supernatant) to the 8-tube strips.



#### 3. SEAL TUBES

Seal the tubes with sterile cap strips.

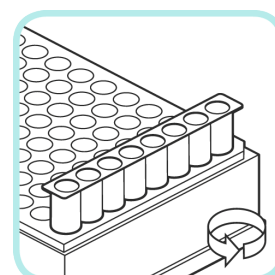


#### 4. CENTRIFUGE RACK

**10 min at 5,400 x g** (or 25 min at 2,000 x g).

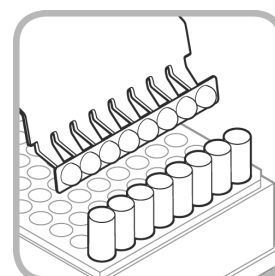
Make sure the rack is not sealed with rack lid during centrifugation.

*Note: Time and g-force depend on the centrifuge (please see 2.1. Required Material for more information). Set the centrifuge acceleration to maximum speed and the brake to medium. If necessary, centrifugation forces should be calculated according to the manual of the used centrifuge.*



#### 5. REMOVE CAPS

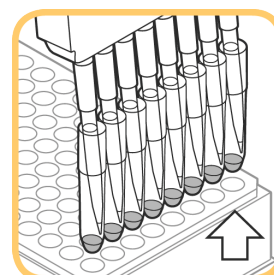
Remove and discard the 8-cap strips from the 8-tube strips. To minimize the contamination risk, use the decapper 8-strip tool.



## 2.3.2. EXTRACTION PROCEDURE B: PCR LIQUID

### 6. REMOVE SUPERNATANT

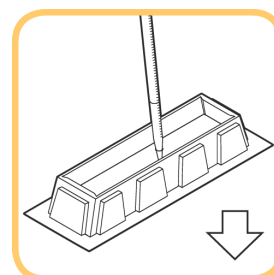
Remove supernatant with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately. Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



### 7. PREPARE LYSIS BUFFER

Transfer required lysis buffer to a sterile reservoir.  
**200 µl** lysis buffer per sample plus **1 ml** lysis buffer as dead volume.

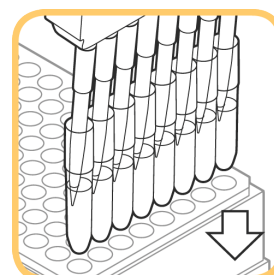
*Note: Use a magnetic stirrer (low speed) or shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.*



### 8. ADD LYSIS BUFFER

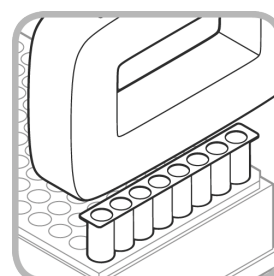
Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients.  
 Transfer **200 µl** lysis buffer with a multichannel pipette to each tube strip.  
**Resuspend pellets** by pipetting up and down 5 to 10 times.

*Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended.*



### 9. SEAL TUBES

Seal the tubes **tightly** with new sterile cap strips.



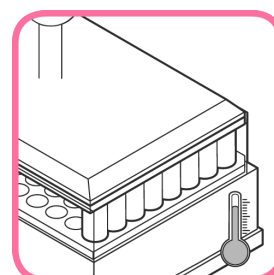
### 10. INCUBATE

**Remove tube rack bottom and install incubation frame.**

Incubate rack with tube stripes **10 - 15 min at 100 °C**  
 in TH 21 Heating Block for 8-tube strips.

Weight caps down with the lid weight.

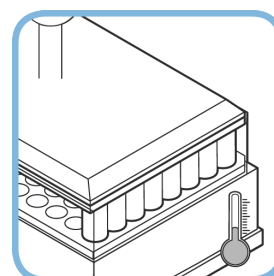
*Note: To avoid removing and reinstalling of the bottom, it is possible to place tube strips in an empty micro tube rack (with rack bottom removed).*



### 11. CHILL

Carefully **remove** the rack with the **tube strips together with the lid weight** from the heating unit and let it **cool 3 - 5 min at room temperature.**

To avoid opening of caps, do not remove the lid weight until the strips have cooled down.

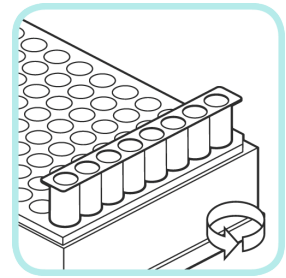


## 2.3.2. EXTRACTION PROCEDURE B: PCR LIQUID

### 12. CENTRIFUGE RACK

**Reinstall tube rack bottom.**

Centrifuge **5 min at 5,400 x g** (or 10 min at 2,000 x g).  
Make sure the rack is not sealed with rack lid during centrifugation.



### SUPERNATANT FOR DETECTION

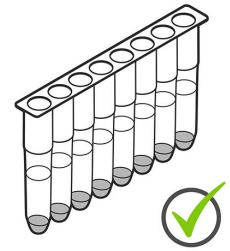
**Use 5 µl of the extract for the respective foodproof® PCR kit.**

*Note: Strictly avoid transferring fractions of the sediment to the PCR reaction, because this might cause PCR inhibition.*

**For later analysis store DNA at -15 to -25 °C.**

After thawing, mix briefly by vortexing and centrifuge at 2,000 x g for 5 min.

*Note: The sample is not purified. Proteins, RNA, and other materials remain in the sample. Long-term storage or archiving of prepared DNA samples is not recommended.*



### 2.3.3. EXTRACTION PROCEDURE C: RAPID

## 2.3.3. EXTRACTION PROCEDURE C: RAPID

This protocol is intended for rapid high-throughput extraction in combination with **foodproof**<sup>®</sup> kits.

It is not suitable for all types of enrichment cultures. Please contact BIOTECON Diagnostics for further information.

### 1. SHAKE SAMPLE

Shake enrichment culture gently and let suspension settle for 5 to 10 min.

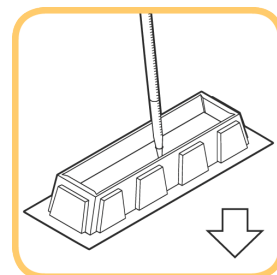


### 2. PREPARE LYSIS BUFFER

Transfer required lysis buffer to a sterile reservoir.

**200 µl** lysis buffer per sample plus **1 ml** lysis buffer as dead volume.

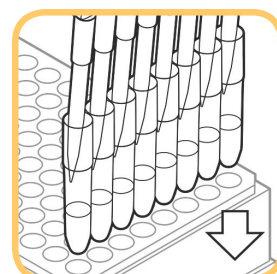
*Note: Use a magnetic stirrer (low speed) or shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.*



### 3. ADD LYSIS BUFFER

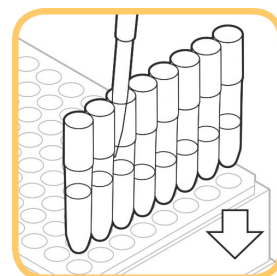
Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients.

Transfer **200 µl** lysis buffer with a multichannel pipette to each tube.



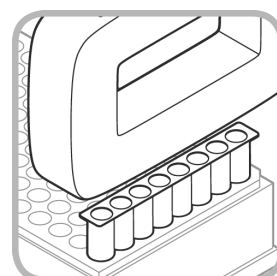
### 4. ADD SAMPLE

Transfer **50 µl** sample (enrichment culture supernatant) to the 8-tube strips.



### 5. SEAL TUBES

Seal the tubes **tightly** with sterile cap strips.





### 2.3.3. EXTRACTION PROCEDURE C: RAPID

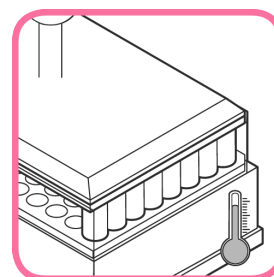
## 6. INCUBATE

**Remove tube rack bottom and install incubation frame.**

Incubate rack with tube stripes **10 - 15 min at 100 °C** in TH 21 Heating Block for 8-tube stripes.

Weight caps down with the lid weight.

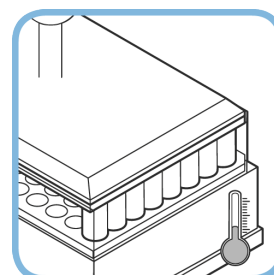
*Note: To avoid removing and reinstalling the bottom, it is possible to place tube strips in an empty micro tube rack (with rack bottom removed).*



## 7. CHILL

Carefully **remove** the rack with the **tube strips together with the lid weight** from the heating unit and let it **cool 3 - 5 min at room temperature**.

To avoid opening of caps, do not remove the lid weight until the strips have cooled down.



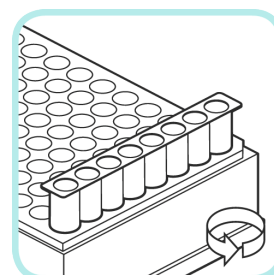
## 8. CENTRIFUGE RACK

**Reinstall tube rack bottom.**

Centrifuge **5 min at 2,000 x g**.

The rack must not be sealed with rack lid for centrifugation.

*Note: Time and g-force depend on the centrifuge (please see 2.1. Required Material for more information). Set the centrifuge acceleration to maximum speed and the brake to medium. If necessary, centrifugation forces should be calculated according to the manual of the used centrifuge.*



## SUPERNATANT FOR DETECTION

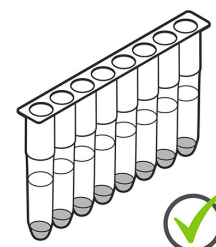
**Use up to 25 µl of the extract for the respective foodproof® PCR kit.**

*Note: Strictly avoid transferring fractions of the sediment to the PCR reaction, because this might cause PCR inhibition.*

**For analysis later on, store DNA at -15 to -25 °C.**

After thawing, mix briefly by vortexing and centrifuge at 2,000 x g for 5 min.

*Note: The sample is not purified. Proteins, RNA, and other materials remain in the sample. Long-term storage or archiving of prepared DNA samples is not recommended.*



## 2.3.4. EXTRACTION PROCEDURE D: LIVE/DEAD

### 2.3.4. EXTRACTION PROCEDURE D: LIVE/DEAD

This protocol is recommended for the detection of *Enterobacteriaceae*, or *Enterobacteriaceae* in combination with other parameter, e.g. *Salmonella* or *Cronobacter*. A step for live and dead cell differentiation with Reagent D (Order No. A 500 02) is included.

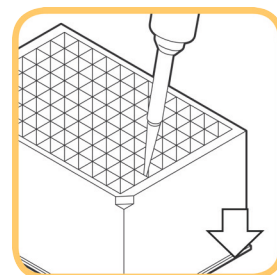
#### 1. SHAKE SAMPLE

Shake enrichment culture gently and let suspension settle for 5 to 10 min.



#### 2. ADD SAMPLE

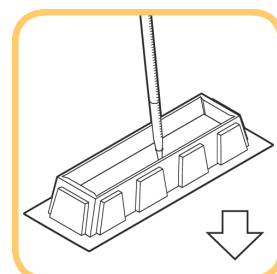
Transfer **100 µl** sample (enrichment culture supernatant) to the 96 deep well plate.



#### 3. PREPARE REAGENT D

Transfer an adequate volume of **Reagent D** in a sterile reservoir:  
**300 µl** per sample and **1 ml** as dead volume.

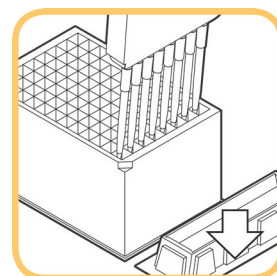
*Note: The lights in the clean bench must be switched off. Proceed immediately with the following steps of the protocol. Avoid extended exposure to light.*



#### 4. ADD REAGENT D AND MIX

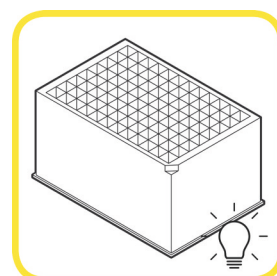
Transfer **300 µl Reagent D** with a multichannel pipette to each well of the deep well plate. **Resuspend pellets** by pipetting up and down 5 times.

*Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended. For uptake of Reagent D and mix, pipet with maximum speed of the automatic pipette. Proceed immediately with the following steps of the protocol. Avoid extended exposure to light.*



#### 5. D-LIGHT TREATMENT

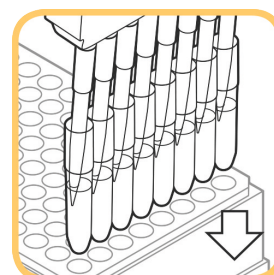
Place the 96 deep well plate in the **D-Light** unit.  
Incubate first **in the dark for 5 min** and subsequently **expose to light for 5 min** at room temperature in the D-Light unit.



## 2.3.4. EXTRACTION PROCEDURE D: LIVE/DEAD

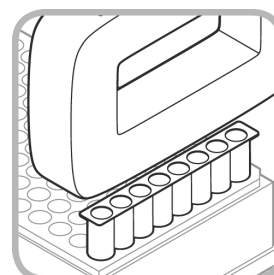
### 6. TRANSFER VOLUME

First **resuspend 5 times** and then transfer the whole volume (400  $\mu$ l) with a multichannel pipette from the 96 deep well plate to 8-tube strips.



### 7. SEAL TUBES

Seal the 8-tube strips **tightly** with sterile cap strips.

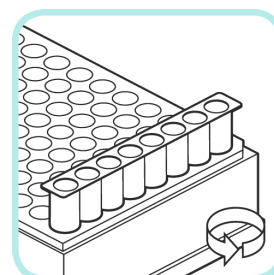


### 8. CENTRIFUGE

**10 min at > 5,400 x g** (or 25 min at 2,000 x g).

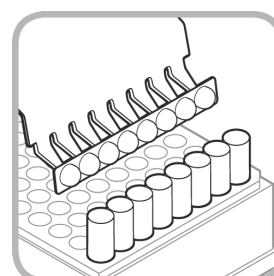
Make sure the rack is not sealed with rack lid during centrifugation.

*Note: Time and g-force depend on the centrifuge (please see 2.1. Required Material for more information). Set the centrifuge acceleration to maximum speed and the brake to medium. If necessary, centrifugation forces should be calculated according to the manual of the used centrifuge.*



### 9. REMOVE CAPS

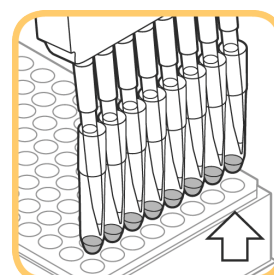
Remove and discard the 8-cap strips from the 8-tube strips. To minimize the contamination risk, use the decapper 8-strip tool.



### 10. REMOVE SUPERNATANT

Remove supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.

Take care that the tips of the pipette in the reaction tubes are not touching the pellets.

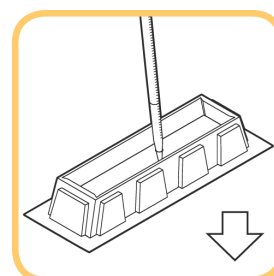


### 11. PREPARE LYSIS BUFFER

Transfer required lysis buffer to a sterile reservoir.

**200  $\mu$ l** lysis buffer per sample plus **1 ml** lysis buffer as dead volume.

*Note: Use a magnetic stirrer (low speed) or shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.*



### 2.3.4. EXTRACTION PROCEDURE D: LIVE/DEAD

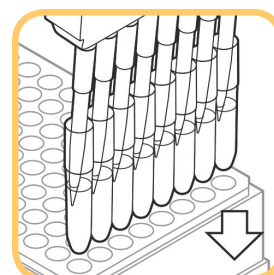
## 12. ADD LYSIS BUFFER AND MIX

Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients.

Transfer **200 µl** lysis buffer with a multichannel pipette to each tube.

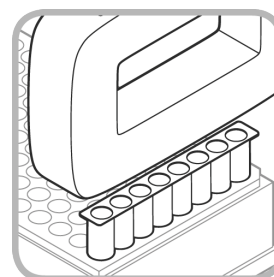
**Resuspend pellets** by pipetting up and down 5 to 10 times.

*Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended.*



## 13. SEAL TUBES

Seal the tubes **tightly** with **new** sterile cap strips.



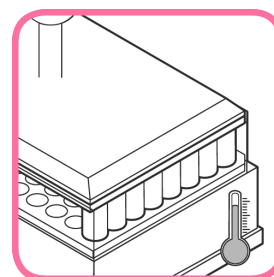
## 14. INCUBATE

**Remove tube rack bottom and install incubation frame.**

Incubate rack with tube stripes **10 - 15 min at 100 °C** in TH 21 Heating Block for 8-tube strips.

Weight caps down with the lid weight.

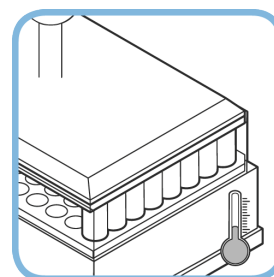
*Note: To avoid removing and reinstalling the bottom, it is possible to place tube strips in an empty micro tube rack (with rack bottom removed).*



## 15. CHILL

Carefully **remove** the rack with the **tube strips together with the lid weight** from the heating unit and let it **cool 3 - 5 min at room temperature**.

To avoid opening of caps, do not remove the lid weight until the strips have cooled down.

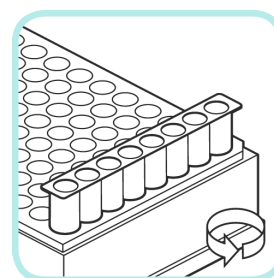


## 16. CENTRIFUGE

**Reinstall tube rack bottom.**

Centrifuge **5 min at > 5,400 x g** (or 10 min at 2,000 x g).

Make sure the rack is not sealed with rack lid during centrifugation.



## SUPERNATANT FOR DETECTION

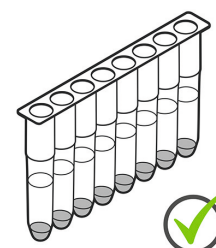
**Use up to 25 µl of the extract for the respective foodproof® PCR kit.**

*Note: Strictly avoid transferring fractions of the sediment to the PCR reaction because this might cause PCR inhibition.*

**For analysis later on, store DNA at -15 to -25 °C.**

After thawing, mix briefly by vortexing and centrifuge at 2,000 x g for 10 min.

*Note: The sample is not purified. Proteins, RNA, and other materials remain in the sample. Long-term storage or archival of prepared DNA samples is not recommended.*



## 2. INSTRUCTIONS

### 2.4. Troubleshooting

Problem	Possible Cause	Recommendation
Extract inhibits PCR	Enrichment culture or sample contains too many PCR inhibitors.	Perform a subcultivation, e.g. 1:10 dilution in fresh enrichment broth. Repeat DNA extraction with a reduced sample volume.
	DNA extract contains too many PCR inhibitors.	Dilute DNA extract, e.g. 1:10, or reduce the amount of extracted DNA, e.g. for LyoKits 5 µl instead of 25 µl.
	Some of the centrifugation pellet transferred over to the PCR.	Always centrifuge the DNA sample before performing PCR. Do not allow the filter tip to have contact with the pellet.
	Supernatants are not completely removed.	Remove supernatants completely (e.g. after Reagent D treatment).
Low DNA yield	Improper storage of kit components.	Store kit reagents at 15 to 25 °C.
	Enrichment culture contains substances that reduce the DNA extraction efficiency.	Perform a subcultivation or dilution, e.g. 1:10 in fresh enrichment broth.
	Sample contains substances that reduce the DNA extraction efficiency.	Reduce the sample volume.
	Not enough target organisms in enrichment culture.	Prolong the incubation phase.
	Pellet resuspension incomplete.	Improve resuspension by prolonged pipetting or vortexing.
	Suboptimal reaction conditions.	Ensure proper heating conditions. Verify correct temperature of the heating block with a thermometer.
Lid of the reaction tube opens during or after heating	Reaction tube not firmly closed or not enough weight exerted on the caps of the tube strips.	Ensure that all reaction tubes are firmly closed before heating. Weigh the caps down during heating and do not remove the weight until the tubes have cooled down.

## 2. INSTRUCTIONS

### 2.5. Support

If you have questions or experience any problems with our products, please contact our

#### **HELPDESK**

**+ 49 (0) 331 / 2300 - 111**

Monday - Friday,  
9:00 am - 5:00 pm Central European Time (CET)

or

**[support@bc-diagnostics.com](mailto:support@bc-diagnostics.com)**

Our aim is to provide you with a solution as quickly and effectively as possible. We would also like you to contact us if you have any suggestions for improving the product or in case you would like to use our product for a different application. We highly value your feedback.

### 3. ADDITIONAL INFORMATION

## 3. ADDITIONAL INFORMATION

### 3.1. Quality Control

All products are regularly monitored by our quality control. You can find the certificate of analysis (CofA) on our website. If you would like to carry out your own quality control, you will find the analysis method described in the certificate.

### 3.2. Waste Disposal

All contaminated and potentially infectious material, like enrichment cultures or food samples, should be autoclaved before disposal and eliminated according to local rules and regulations. For proper disposal of unused chemicals, please refer to the MSDS.

### 3.3. Warranty and Disclaimer of Liability

“Limited Warranty” and “Disclaimer of Liability”: BIOTECON Diagnostics warrants that this product is free from defects in materials and workmanship through the expiration date printed on the label and only if the following are complied with:

- (1) The product is used according to the guidelines and instructions set forth in the product literature;
- (2) BIOTECON Diagnostics does not warrant its product against any and all defects when: the defect is as a result of material or workmanship not provided by BIOTECON Diagnostics; defects caused by misuse or use contrary to the instructions supplied, or improper storage or handling of the product;
- (3) All warranties of merchantability and fitness for a particular purpose, written, oral, expressed or implied, shall extend only for a period of one year from the date of manufacture. There are no other warranties that extend beyond those described on the face of this warranty;
- (4) BIOTECON Diagnostics does not undertake responsibility to any purchaser of its product for any undertaking, representation or warranty made by any dealers or distributors selling its products beyond those herein expressly expressed unless expressed in writing by an officer of BIOTECON Diagnostics;
- (5) BIOTECON Diagnostics does not assume responsibility for incidental or consequential damages, including, but not limited to responsibility for loss of use of this product, removal or replacement labor, loss of time, inconvenience, expense for telephone calls, shipping expenses, loss or damage to property or loss of revenue, personal injuries or wrongful death;
- (6) BIOTECON Diagnostics reserves the right to replace or allow credit for any modules returned under this warranty.

### 3. ADDITIONAL INFORMATION

## 3.4. Trademarks

**foodproof**<sup>®</sup>, **microproof**<sup>®</sup>, **vetproof**<sup>®</sup>, **ShortPrep**<sup>®</sup>, **RoboPrep**<sup>®</sup> and **LyoKit**<sup>®</sup> are trademarks of BIOTECON Diagnostics GmbH.

Other brand or product names are trademarks of their respective holders.

## 3.5. Change Index

Version 4, April 2021:

Protocol “Live/Dead” added.



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