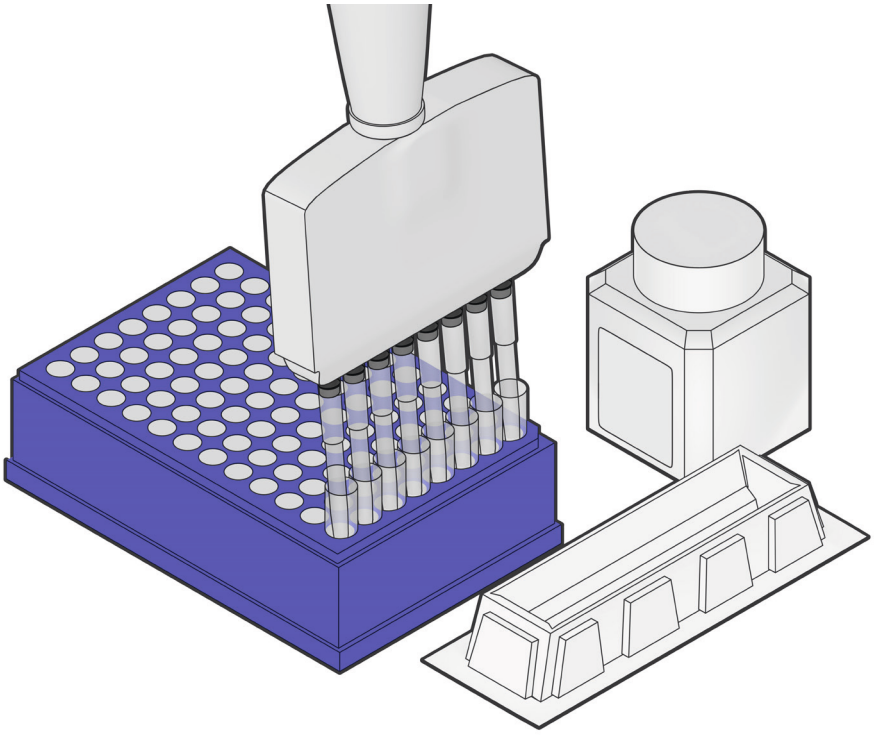
BIOTECON Diagnostics



foodproof®

StarPrep Two 8-Strip Kit

Aspergillus

MANUAL

Documentation for the high-throughput extraction of DNA from *Aspergillus* for direct use in PCR

Order No. S 400 17 L

foodproof®

StarPrep Two 8-Strip Kit

Aspergillus

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

Order No. S 400 17 L
Kit for 480 reactions

Manual:
Version 1, April 2021

TABLE OF CONTENTS

1. OVERVIEW

The **food**proof® StarPrep Two 8-Strip Kit is designed for the rapid preparation of DNA from yeast or mold like *Aspergillus* for direct use in PCR. Up to 96 samples can be processed in parallel. In less than 30 minutes, the kit generates PCR template DNA from up to 1,000 µl of enrichment culture. The obtained DNA can be used directly in any PCR application. The special 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 biohazardous material. The reduced number of handling steps results in time saving and, because transfer steps of DNA-containing extracts are not necessary, the cross-contamination risks are minimized.

1.1. General Information

Number of Reactions

The kit is designed for 480 reactions.

Storage Conditions

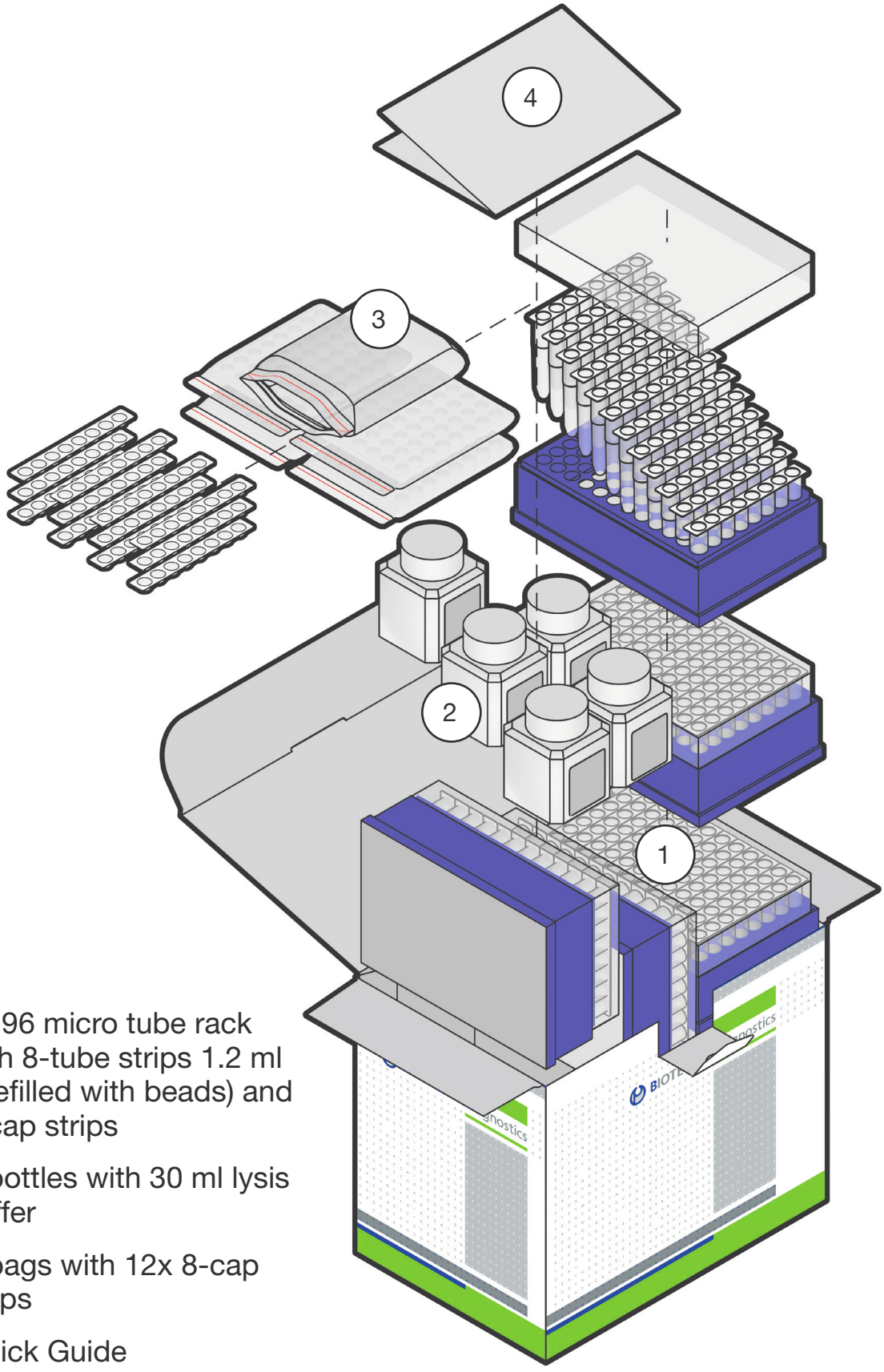
Store at 15 to 25 °C.
The components of the **food**proof® StarPrep Two 8-Strip Kit are guaranteed to be stable through the expiration date printed on the label.

1.2. Applicability

The lysis buffer can be used to prepare DNA from up to 1,000 µl 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.

1.3. Kit Contents

A schematic representation of the **food**proof® StarPrep Two 8-Strip Kit with all components:



1. 5x 96 micro tube rack with 8-tube strips 1.2 ml (prefilled with beads) and 8-cap strips

2. 5 bottles with 30 ml lysis buffer

3. 5 bags with 12x 8-cap strips

4. Quick Guide

2. INSTRUCTIONS

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

2.1. Required Material

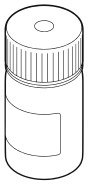
Most of the required equipment and reagents are available through BIOTECON Diagnostics. Please contact us for further information. To place an order, please call +49 (0) 331 2300 200 or send an email to order@bc-diagnostics.com.

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

Reagents

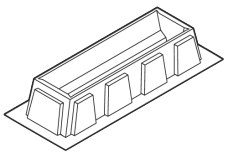
☐ **Reagent D**
Order No. A 500 02

only for procedure C (2.3.3.)



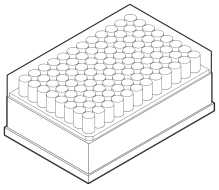
Consumables

☐ Sterile **reservoir**
25 ml (Order No. Z 100 60),
100 ml (Order No. Z 100 62)



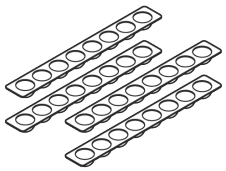
☐ **8-strip tubes, 1.2 ml** - 12 x (96 well)
Order No. Z 100 72

only for procedure C (2.3.3.)



☐ **8-Cap strips for micro tube rack**
Order No. Z 100 73

for procedures B (2.3.2) and C (2.3.3.)



Equipment

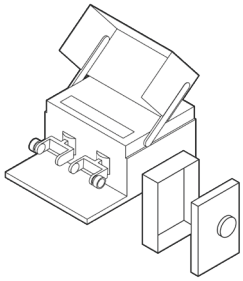
☐ **Multichannel pipette** and filter tips

e.g. 8-Channel Pipette VIAFLO - INTEGRA Biosciences (Order No. D 111 43);
GripTips: 50 to 1,250 µl (Order No. Z 111 33)

or EP Xplorer Plus Electronic Multichannel Pipette (Order No. D 110 40);
Filter Tips: 50 to 1,250 µl (Order No. Z 100 58)

☐ **Unit for mechanical cell disruption** suitable for working with 1.2 ml x 8-tube strips

Mixer Mill 400 Retsch GmbH (Order No. D 110 47) with rack adapter *TissueLyser Adapter Set 2x96 Qiagen (Order No. D 110 51)*

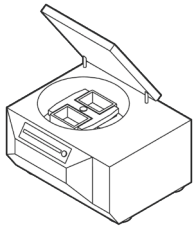


☐ **Centrifuge** with swing-out rotor for microtiter plates capable of a > 5,400 × g centrifugal force

e.g. Sigma 4-16S including rotor (Order No. D 110 90.1 - D 110 91)

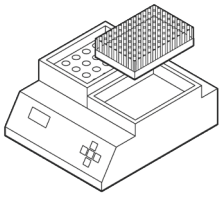
Or **centrifuge** with swing-out rotor for microtiter plates capable of a 2,000 × g centrifugal force

e.g. Sigma 2-7 including rotor (Order No. D 110 97 - D110 97.1)

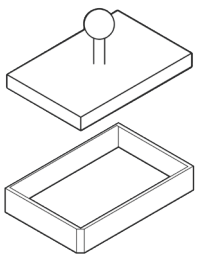


☐ **TH 21 heating block thermostat**
Order No. D 110 38

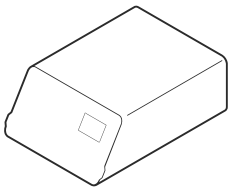
☐ Exchange block for deepwell plates for TH 21
Order No. D 110 39



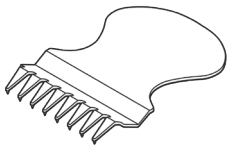
☐ **Lid weight** with **incubation frame** for TH 21 heating block thermostat
Order No. Z 100 96.1



☐ **D-Light**
Order No. D 110 45
only for procedure C (2.3.3.)

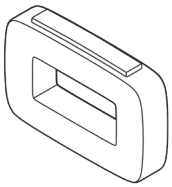


☐ **Decapper 8-strip**
Order No. Z 100 77



Recommended:

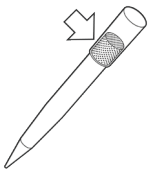
☐ **Cap installing tool**
Order No. Z 100 76



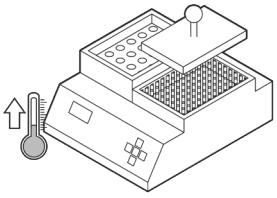
2.2. Precautions and Preparations

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.

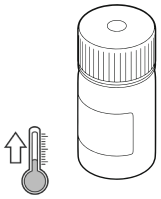
☐ Always use filter tips in order to avoid cross-contamination.



☐ 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 C (2.3.3.)



2.3. Workflows

The chapter 2.3. provides workflows for a qualitative analysis of molds like *Aspergillus* in different cannabis or hemp matrices.
The Standard protocol (2.3.1.) describes the DNA extraction from up to 1,000 µl enrichment culture.
The High Purity protocol (2.3.2.) describes the DNA extraction from difficult matrices. Inhibitory effects of the matrix are reduced by an additional wash step.
The Live/Dead protocol (2.3.3.) describes the DNA extraction including a step for live and dead cell differentiation with Reagent D.

2.3.1. EXTRACTION PROCEDURE A: STANDARD

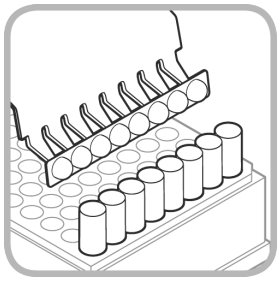
The following protocol describes the DNA isolation from 1,000 µl enrichment culture using 8-tubes strips and multichannel pipettes. This short protocol is recommended for matrices like plant flowers and oils.

1. SHAKE SAMPLE

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

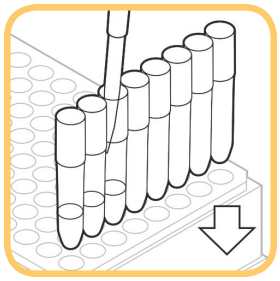
2. REMOVE CAPS

Remove the 8-cap strips from the 8-tube strips and **keep sterile** for later use.
To minimize the contamination risk, use the decapper 8-strip tool.



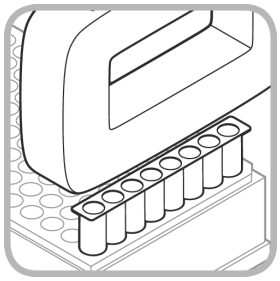
3. ADD SAMPLE

Transfer **1,000 µl** sample (enrichment culture supernatant) to the 8-tube strips.



4. SEAL TUBES

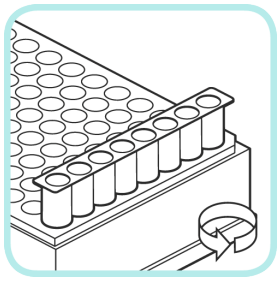
Seal the tubes with sterile cap strips.



5. CENTRIFUGE

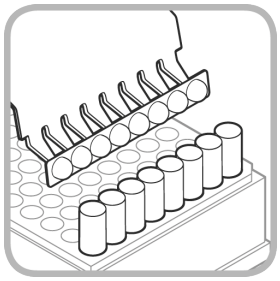
10 min at 5,400 x g (or 25 min at 2,000 x g).
Make sure the rack is not sealed with rack lid during centrifugation.

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.



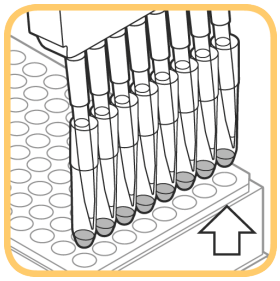
6. REMOVE CAPS

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



7. REMOVE SUPERNATANT

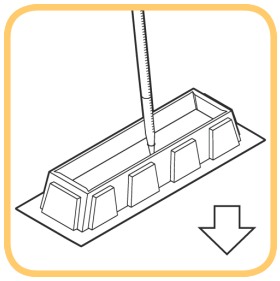
Remove **only 900 µl** supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.
100 µl have to remain in the tube.
Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



8. PREPARE LYSIS BUFFER

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

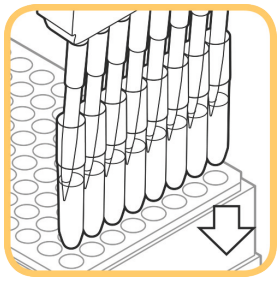
Note: Shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.



9. ADD LYSIS BUFFER AND MIX

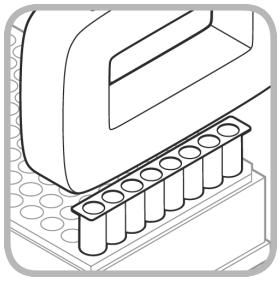
Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients.
Transfer **300 µl** lysis buffer with a multichannel pipette to each tube.
Resuspend pellets by pipetting up and down 5 to 10 times.

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



10. SEAL TUBES

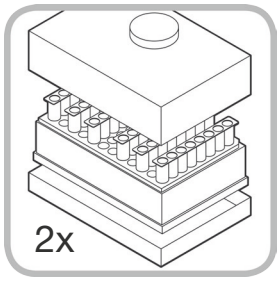
Seal the tubes **tightly** with **new** sterile cap strips.

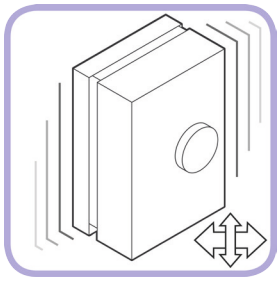


11. INSTALL ADAPTER SET

Place the rack **without rack lid** in the TissueLyser Adapter Set.

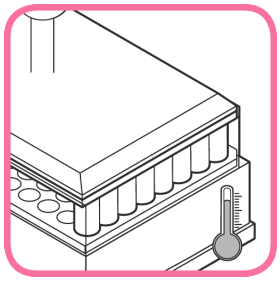
Note: Split the tube strips into 2 groups and place them into two tube racks to prepare appropriate counterweights for disruption. Place the tube strips into the racks in an even and balanced manner. Make sure each rack contains at least two strips placed in the outermost positions (row 1 and 12 of the rack). If you prepare only a few samples (less than 4 strips) it is necessary to use additional tube strips prefilled with 400 µl water to balance it out.





12. MECHANICAL DISRUPTION

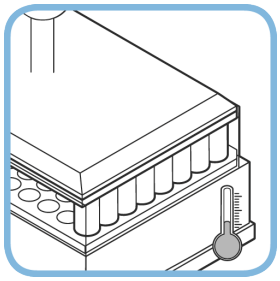
Place the 2 adapters in the cell disruption unit and run mechanical disruption **Mixer Mill 400: 15 min at 30 Hz.**
The efficiency of disruption depends on the mechanical cell disruption unit.



13. INCUBATE

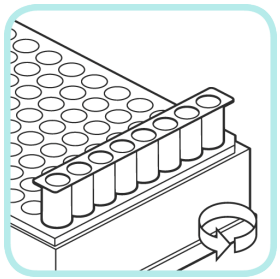
Remove tube rack bottom and install incubation frame.
Incubate rack with tube stripes **5 min at 100 °C** in TH 21 Heating Block for 8-tube strips.
Weight caps down with the lid weight.

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).



14. 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.



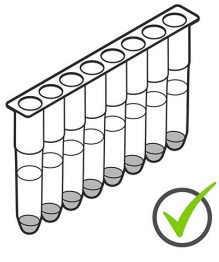
15. CENTRIFUGE

Reinstall tube rack bottom.
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.

SUPERNATANT FOR DETECTION

Use 5 µl supernatant in combination with foodproof® **PCR Kits**.
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 × 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.



2.3.2. EXTRACTION PROCEDURE B: HIGH PURITY

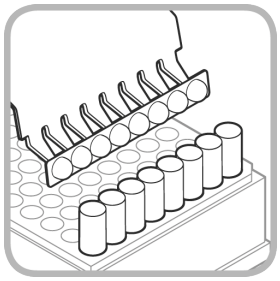
This protocol includes a wash step. As a result it reduces inhibitory effects of the used matrix or enrichment culture media. This protocol is recommended for matrices like edibles and non-edibles.

1. SHAKE SAMPLE

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

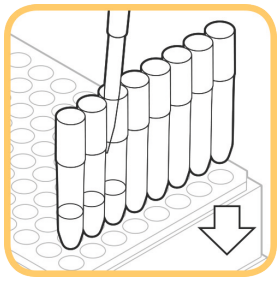
2. REMOVE CAPS

Remove the 8-cap strips from the 8-tube strips and **keep sterile** for later use.
To minimize the contamination risk, use the decapper 8-strip tool.



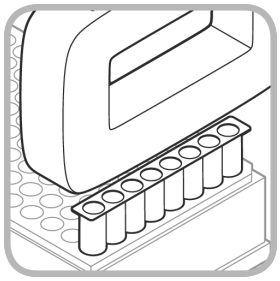
3. ADD SAMPLE

Transfer **1,000 µl** sample (enrichment culture supernatant) to the 8-tube strips.



4. SEAL TUBES

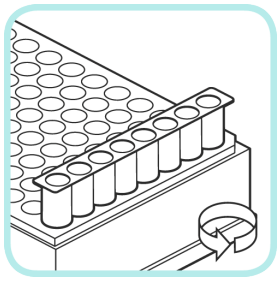
Seal the tubes with sterile cap strips.



5. CENTRIFUGE

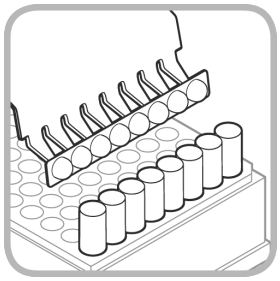
10 min at 5,400 x g (or 25 min at 2,000 x g).
Make sure the rack is not sealed with rack lid during centrifugation.

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.



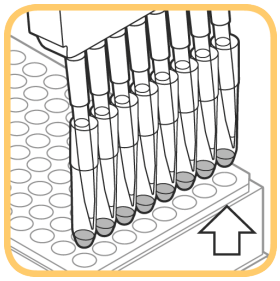
6. REMOVE CAPS

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



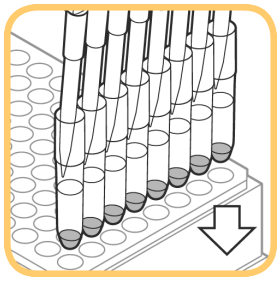
7. REMOVE SUPERNATANT

Remove **only 900 µl** supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.
100 µl have to remain in the tube.
Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



8. ADD WASH BUFFER

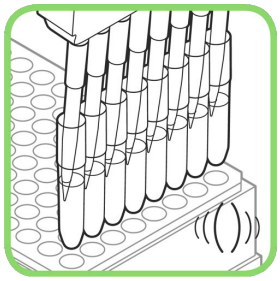
Add **600 µl sterile bidest water** to wash the pellet.



9. MIX

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

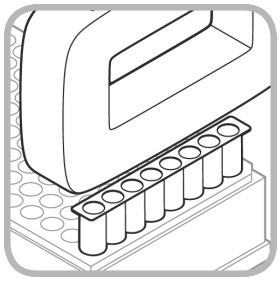
Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended.



10. SEAL TUBES

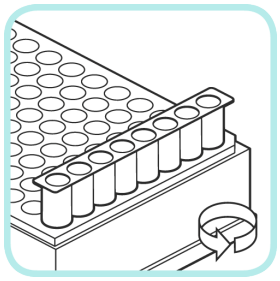
Seal the tubes **tightly** with **new** sterile cap strips.

Note: Use additional consumable: 8-cap strips for micro tube rack, see 2.1. Material Required.



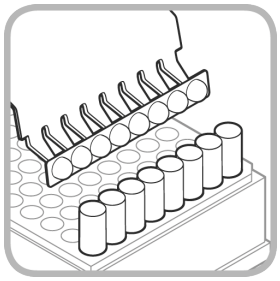
11. CENTRIFUGE

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.



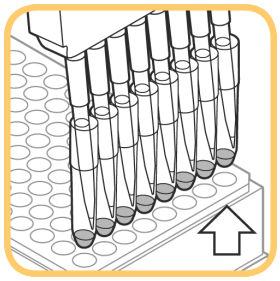
12. REMOVE CAPS

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



13. REMOVE SUPERNATANT

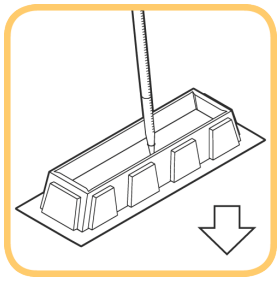
Remove **only 600 µl** supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.
100 µl have to remain in the tube.
Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



14. PREPARE LYSIS BUFFER

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

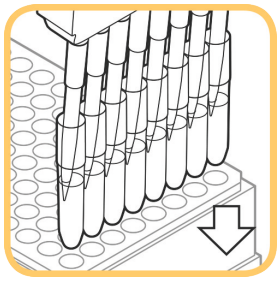
Note: Shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.



15. ADD LYSIS BUFFER AND MIX

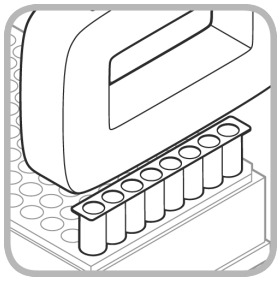
Pipet lysis buffer up and down 5 to 10 times in reservoir before using it to avoid sedimentation of ingredients.
Transfer **300 µl** lysis buffer with a multichannel pipette to each tube.
Resuspend pellets by pipetting up and down 5 to 10 times.

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



16. SEAL TUBES

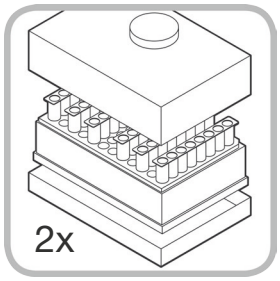
Seal the tubes **tightly** with **new** sterile cap strips.

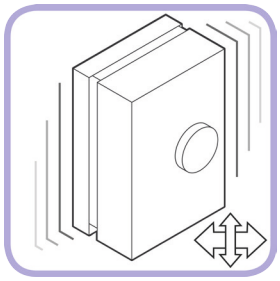


17. INSTALL ADAPTER SET

Place the rack **without rack lid** in the TissueLyser Adapter Set.

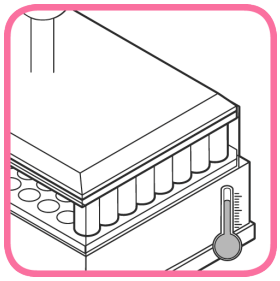
Note: Split the tube strips into 2 groups and place them into two tube racks to prepare appropriate counterweights for disruption. Place the tube strips into the racks in an even and balanced manner. Make sure each rack contains at least two strips placed in the outermost positions (row 1 and 12 of the rack). If you prepare only a few samples (less than 4 strips) it is necessary to use additional tube strips prefilled with 400 µl water to balance it out.





18. MECHANICAL DISRUPTION

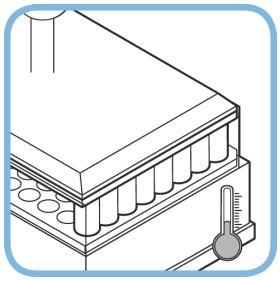
Place the two adapters in the cell disruption unit and run mechanical disruption **Mixer Mill 400: 15 min at 30 Hz.**
The efficiency of disruption depends on the mechanical cell disruption unit.



19. INCUBATE

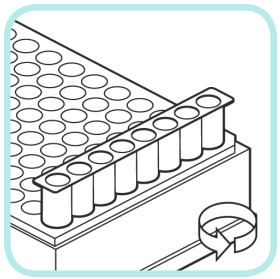
Remove tube rack bottom and install incubation frame.
Incubate rack with tube stripes **5 min at 100 °C** in TH 21 Heating Block for 8-tube strips.
Weight caps down with the lid weight.

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).



20. 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.



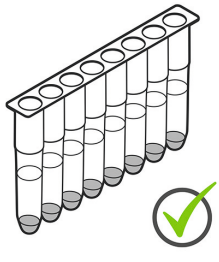
21. CENTRIFUGE

Reinstall tube rack bottom.
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.

SUPERNATANT FOR DETECTION

Use 5 µl supernatant in combination with foodproof® **PCR Kits**.
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 × 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.



2.3.3. EXTRACTION PROCEDURE C: LIVE/DEAD

The following protocol describes the DNA isolation including a step for live and dead cell differentiation with Reagent D.

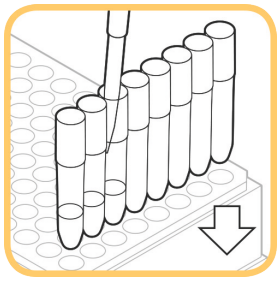
1. SHAKE SAMPLE

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

2. ADD SAMPLE (RACK 1)

Transfer **1,000 µl** sample (enrichment culture supernatant) to the empty 8-Tube strips (without beads) of rack 1.

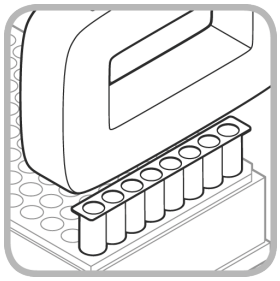
Note: Use additional consumable: 96 MicroTube rack with 8-tube strips 1.2 ml , see 2.1. Material Required.



3. SEAL TUBES

Seal the tubes of rack 1 **tightly** with **new** sterile cap strips.

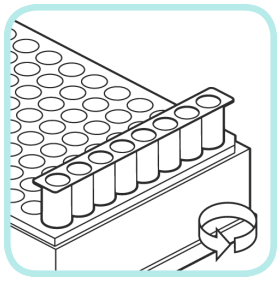
Note: Use additional consumable: 8-cap strips for micro tube rack, see 2.1. Material Required.



4. CENTRIFUGE

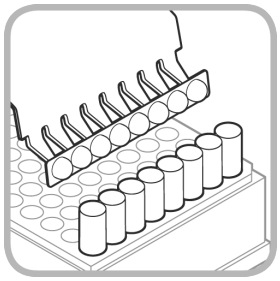
10 min at 5,400 x g (or 25 min at 2,000 x g).
Make sure the rack is not sealed with rack lid during centrifugation.

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.



5. REMOVE CAPS

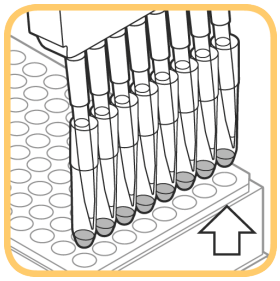
Remove and discard the 8-cap strips from the 8-tube strips.
To minimize the contamination risk, use the decapper 8-strip tool.



6. REMOVE SUPERNATANT

Remove **only 900 µl** supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.

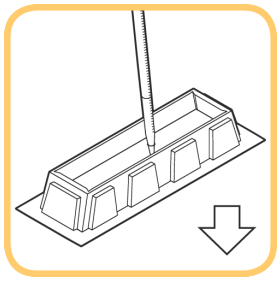
Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



7. PREPARE REAGENT D

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

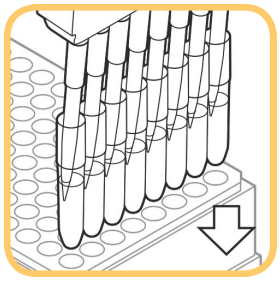
Note: The lights in the clean bench must be switched off. Proceed immediately with the following steps of the protocol. Avoid extended exposure to light.



8. ADD REAGENT D AND MIX

Transfer **300 µl Reagent D** with a multichannel pipette to each tube of rack 1. **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.

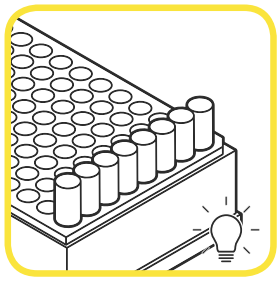


9. D-LIGHT TREATMENT

Do not seal the 8-tube strips with with 8-cap strips.

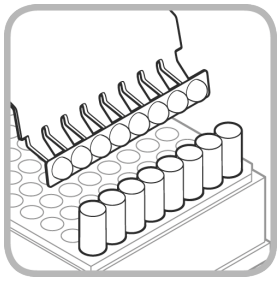
Close the 8-tube strips of rack 1 with the **transparent rack lid only** and place it in the D-Light unit.

Incubate first **in the dark for 10 min** and subsequently **expose to light for 5 min** at room temperature in the D-Light unit.



10. REMOVE CAPS (RACK 2)

Remove and discard the 8-cap strips from a **new 8-tube strip with beads** (Rack 2). To minimize the contamination risk, use the decapper 8-strip tool.



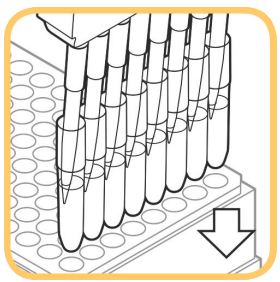
11. ADD VOLUMES OF RACK 1 TO RACK 2

Resuspend samples in rack 1 five times.

Transfer **400 µl volume** from the 8-tube strips of rack 1 (from step 9) with a multichannel pipette to the 8-tube strips with beads and wash buffer of rack 2.

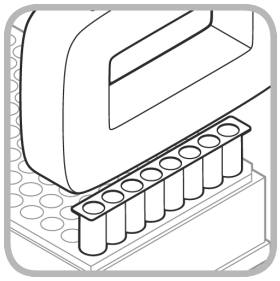
Mix five times.

Note: For uptake and mix pipet with maximum speed of the automatic pipette.



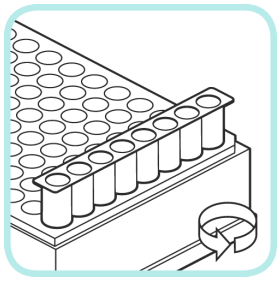
12. SEAL TUBES

Seal the tubes of rack 2 **tightly** with sterile cap strips.



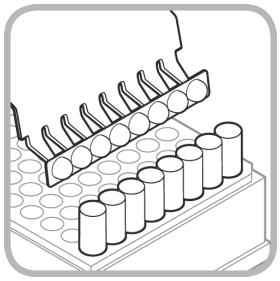
13. CENTRIFUGE

Reinstall tube rack bottom.
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.



14. REMOVE CAPS

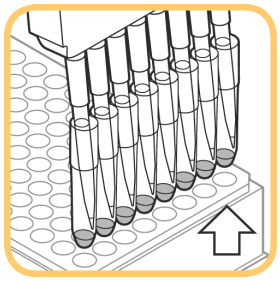
Remove and discard the 8-cap strips from the 8-tube strips.
To minimize the contamination risk, use the decapper 8-strip tool.



15. REMOVE SUPERNATANT

Remove **300 µl** supernatant carefully with a multichannel pipette immediately after centrifugation, discard and inactivate appropriately.

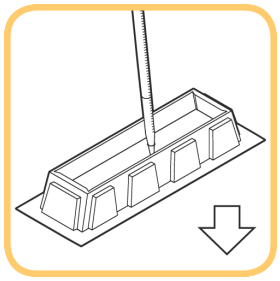
Take care that the tips of the pipette in the reaction tubes are not touching the pellets.



16. PREPARE LYSIS BUFFER

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

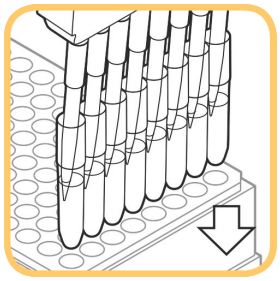
Note: Shake the bottle with lysis buffer gently in a short time interval to avoid sedimentation of ingredients.

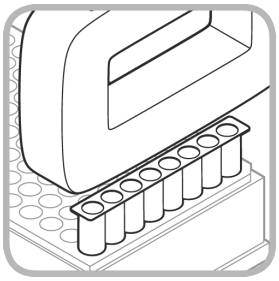


17. ADD LYSIS BUFFER AND MIX

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

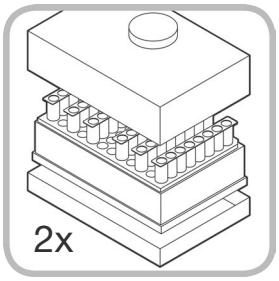
Note: For optimal DNA isolation efficiency, pellet has to be completely resuspended.





18. SEAL TUBES

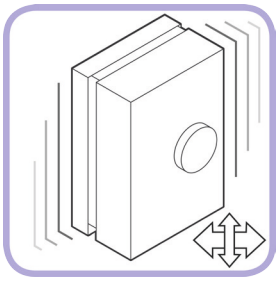
Seal the tubes **tightly** with **new** sterile cap strips.



19. INSTALL ADAPTER SET

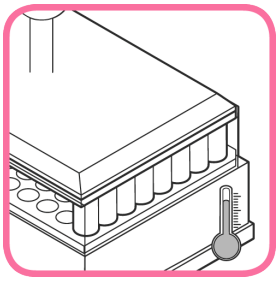
Place the rack **without rack lid** in the TissueLyser Adapter Set.

Note: Split the tube strips into 2 groups and place them into two tube racks to prepare appropriate counterweights for disruption. Place the tube strips into the racks in an even and balanced manner. Make sure each rack contains at least two strips placed in the outermost positions (row 1 and 12 of the rack). If you prepare only a few samples (less than 4 strips) it is necessary to use additional tube strips prefilled with 400 µl water to balance it out.



20. MECHANICAL DISRUPTION

Place the 2 adapters in the cell disruption unit and run mechanical disruption
Mixer Mill 400: 15 min at 30 Hz.
The efficiency of disruption depends on the mechanical cell disruption unit.



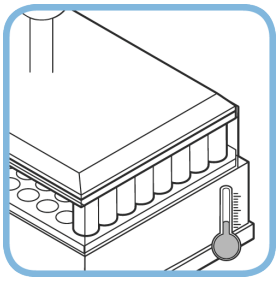
21. INCUBATE

Remove tube rack bottom and install incubation frame.

Incubate rack with tube stripes **5 min at 100 °C**
in TH 21 Heating Block for 8-tube strips.

Weight caps down with the lid weight.

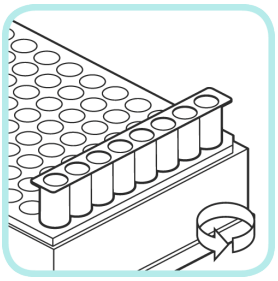
Note: To avoid removing and reinstalling the bottom, it is possible to place tube strips in an empty micro tube rack (with rack bottom removed).



22. 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**.

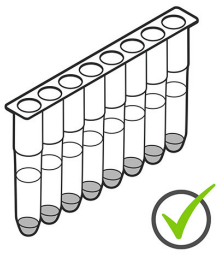
To avoid opening of caps, do not remove the lid weight until the strips have cooled down.



23. CENTRIFUGE

Reinstall tube rack bottom.
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.

SUPERNATANT FOR DETECTION



Use 5 µl supernatant in combination with foodproof® **PCR Kits**.

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 × 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.

2.4. Troubleshooting

Problem	Possible Cause	Recommendation
	DNA extract contains too many PCR inhibitors.	Dilute DNA extract, e.g. 1:5, or reduce the amount of extracted DNA.
	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.
	Sample contains substances that reduce the DNA extraction efficiency.	Reduce the sample volume.
	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.

2.5. 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

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

3.1. 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.

3.4. Trademarks

foodproof®, **micro**proof®, **vet**proof® , ShortPrep® , RoboPrep® and LyoKit® are trademarks of BIOTECON Diagnostics GmbH.
Other brand or product names are trademarks of their respective holders.

3.5. Change Index

Version 1, April 2021:
New document layout and content.

BIOTECON
Diagnostics GmbH

Hermannswerder 17
14473 Potsdam
Germany

Phone: +49 (0)331 2300 200
Fax: +49 (0)331 2300 299

bcd@bc-diagnostics.com
www.bc-diagnostics.com