OptiGene Campylobacter Detection from Boot Swab (Dried Strips)

Standard Operating Procedure

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SAFETY: This test involves the use of Potassium Hydroxide which is caustic and should not be allowed to come into contact with skin or eyes. Safety glasses and protective disposable gloves should be worn at all times. Refer to the supplied MSDS for further details.

NOTE: The <u>Lysis Buffer</u> is prepared by adding 1 ml water to one of the Potassium Hydroxide (KOH) tubes (dried). Mix well by shaking or with a vortex. This can then be used for many test strips as only 10 µl are used for each one.

- 1. Preparation
- i) Set the HotBlock temperature to 80°C and the heating time to 5 minutes.
- ii) With the run mode at 'Wait at target' press the start button.
- iii) Place the Lysis Tube(s) and Lysis Buffer Solution into the Setup Rack.
- iv) Remove the cap(s) from the Lysis Tube(s).
- 2. Process Boot Swab
- i) Unscrew the lid from Sample Pot and remove the ball bearing.
- v) Add water to the Sample Pot up to the level of the black line (~100 ml).
- vi) Put the Boot Swab in the Sample Pot.
- vii) Place the ball bearing on top of the Boot Swab in the Sample Pot.
- viii) Screw the lid securely back on the Sample Pot.
- ix) Holding the pot with both hands shake vigorously for 15 seconds.
- 3. Collect extract
- i) Remove the luer cap from the Sample Pot lid.
- ii) Connect the Luer Syringe in its place.
- iii) Withdraw at least 3 ml of fluid into the Syringe.
- iv) Disconnect the Syringe and dispense 1 ml directly into the 2 ml Lysis Tube. Cap the Lysis Tube.
- v) Discard the Syringe to waste.
- vi) Replace the luer cap back on the Sample Pot lid and discard to waste.
- vii) Shake the Lysis tube vigorously for a few seconds to mix.
- 4. Lysis and Genie Strip preparation
- i) Place the Lysis Tube in the HotBlock at 80°C and press the start button.
- ii) After 5 minutes the HotBlock will beep.
- iii) Transfer the Lysis Tube(s) back to the Setup Rack and leave to cool for 5 minutes.

WHILE THE LYSIS TUBE(S) IS COOLING:-

- iv) Open the foil pack and remove the Genie Strip.
- v) Place the Genie Strip in the Setup Rack.
- vi) Remove the sealing film from the Genie Strip.
- vii) Transfer 20 μl of Resuspension Fluid into all 8 wells of the Genie Strip (single pipette tip).
- viii) Transfer 5 µl of Lysis Buffer into tubes 7 and 8 of the Genie Strip (single pipette tip) and close caps.
- 5. DNA Amplification
- i) Once the 5 minute cooling period is over, transfer 5μl from the clearest liquid at the top of each Lysis Tube(s) into one of wells 1 6 of the Genie Strip and cap the tube.
- ii) Cap the Lysis Tube and dispose to waste.
- iii) Once all samples have been transferred to the Genie Strip make sure that all 8 tubes are securely capped.
- iv) 'Flick' the strip rapidly to make sure that the contents of each tube is at the base.
- v) Place the Genie Strip into the Genie Instrument making sure that the two pins pass through the two slots of the strip.
- vi) Close the door of the Genie Instrument.
- vii) Select the 'Campylobacter' button from the touch screen menu.
- viii) Genie II: select block A or block B to run the test
 - Genie III: press the Start button to run the test

OptiGene Campylobacter detection from Boot Swab

Kit contents

Equipment

- 1. Genie II or Genie III instrument with mains power adaptor
- 2. Genie HotBlock or Genie Mini HotBlock instrument with mains power adaptor
- 3. Pipette, 20µl
- 4. Pipette, 5μl
- 5. Setup rack
- 6. Disposable gloves
- 7. Safety glasses
- 8. Standard Operating Procedure (SOP)
- 9. Materials Data Safety Sheet for Potassium Hydroxide

Consumables

- 1. Boot swab Sample Pot
- 2. Plastic tongs
- 3. Luer Syringe 5 ml
- 4. Genie Strip Campylobacter reagent strip (dried)
- 5. Resuspension fluid
- 6. Lysis Buffer
- 7. Potassium Hydroxide (KOH) tube (dried)
- 8. Pipette tips P20/2000