ASSAY PRINCIPLES

Veriflow® Campylobacter is a molecular based assay for the presumptive and qualitative detection of the most common occurring foodborne Campylobacter species: Campylobacter jejuni and Campylobacter coli. The assay utilizes a PCR detection method coupled with a rapid, visual, flow-based assay that develops in 3 minutes post PCR amplification and requires only 24 hours of non-specialized incubation for maximum sensitivity. The Veriflow® Campylobacter system eliminates the need for microaerobic chambers, gel electrophoresis or fluorophore based detection of target amplifications, and does not require complex data analysis. Veriflow® Campylobacter provides the specificity and sensitivity of PCR based amplification in a cost-efficient and easy-to-use format.

INTENDED USER

The Veriflow® Campylobacter system is intended for use by personnel familiar with basic sample collection and preparation techniques associated with foodborne pathogen detection. Veriflow® Campylobacter is specifically designed to be easy-to-use and eliminates the need for advanced training in molecular biology.

MSDS INFORMATION AVAILABLE

Material Safety Data Sheets (MSDS) are available for this test kit and all of Invisible Sentinel’s test kits by calling Invisible Sentinel at 215-966-6118.

APPENDIX 1: ASSAY APPLICABILITY

Veriflow® Campylobacter has been approved for the detection of C. jejuni and C. coli in chicken carcass rinsates.

APPENDIX 2: RESULTS INTERPRETATION

The control line, as indicated by the letter C on the Veriflow® Campylobacter cassette, should always develop. The test line, as indicated by the letter T on the Veriflow® Campylobacter cassette, will only develop in the event of a positive sample for Campylobacter jejuni or Campylobacter coli. If the control line fails to develop, the test is invalid and will need to be repeated.

APPENDIX 3: CONFIRMATION OF RESULTS

Presumptive positive samples must be confirmed by the current USDA/FSIS method for the detection of Campylobacter from poultry rinses.

Samples (un-boiled) from the chicken carcass rinse achieved using this protocol can be used for the confirmation, following the necessary steps laid out in the USDA/FSIS Microbiology Laboratory Guidebook chapter 41.01 (as may be updated, amended or superseded from time to time).

APPENDIX 4: DISPOSAL

Invisible Sentinel devices are for single use only. Decontaminate all surfaces, media and reagents and discard in accordance with local, state and federal regulations.
1. Media Prep A: Add 58.0 grams IS Enhanced Bolton Broth per 1 liter dH₂O (2X concentration).
2. Autoclave rehydrated media from steps 1 and 2 above for 15 minutes and allow to cool to room temperature (20-25°C). (Use IS Enhanced Bolton broth media within 24 hours of preparation.)
3. Boil sample from step 3 in water bath for 10 minutes and allow to cool to room temperature (20-25°C).
4. Do not use Veriflow® Campylobacter Assay kit past indicated expiration date.
5. Place 50 mL conical tube from MEDIA PREPARATION AND CARCASS RINSE Step 8 into the 50 mL conical tube from Step 1.
6. Heat tolerant beaker
7. Pour 400 mL rehydrated IS BPW broth from Step 3 into bag with carcass. Seal bag and agitate sample for 1 to 2 minutes.
8. Pipette 27 mL of chicken carcass rinse from Step 7 into the 50 mL conical tube from Step 5 for a final 54 mL volume. Tightly cap conical tube and invert twice to mix sample.

9. Glassware and autoclave for media prep
10. 70% isopropanol (IPA) spray bottle (optional)
11. Pipettes and tips for 5 µL, 200 µL and 1000 µL volumes
12. 50 mL or 25 mL Serological pipettes
13. Heat plate/heat source for boiling water bath
14. Incubator that provides continuous and stable temperatures of 37°C ± 1°C and 42°C ± 1°C
15. Hot plate/heat source for boiling water bath
16. Retract Veriflow® Campylobacter cassette switch and record results.
17. Bath and boiling water bath
18. Camara Biochemistry Laboratory
19. The appearance of one red line (control) in the Veriflow® Campylobacter cassette sample window indicates a positive result.
20. The appearance of two red lines (control and test) in the Veriflow® Campylobacter cassette sample window indicates a positive result.

CUSTOMER SERVICE
Invisible Sentinel customer service and technical assistance can be reached Monday-Friday between 9AM and 5PM Eastern Standard Time by calling 215-966-6118 and asking for an Invisible Sentinel sales or technical representative. Training on this product and all Invisible Sentinel test kits is available.

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