



Increasing demand requires  
effective and efficient solutions

**Poultry processors need microbial detection tools  
designed for their unique challenges**







# PROTECT YOUR BRAND WITH THE MOST ROBUST MICROBIAL DETECTION TOOL IN THE FOOD INDUSTRY



## THE CHALLENGE

### Growing demand for safe poultry products

Consumer appetite for all things chicken has created a growing demand for fresh, safe, and inexpensive poultry products. The stakes have never been higher for poultry processors charged with managing quality at the plant. As production volumes increase and efficient practices are required to stay competitive, active monitoring of microbial populations in raw poultry has become commonplace. Ensuring ready-to-eat products are pathogen free is an everyday challenge.

Due to increased competition and stricter regulations, raw poultry processors are continuously improving their quality practices and implementing protocols to reduce microbial populations before processing even begins. For ready-to-eat poultry there is no margin for error in delivering pathogen-free products to the market. FSMA has placed a greater emphasis on preventive quality controls that include early detection coupled with rigorous microbial reduction programs. However, most rapid detection methods available today are inefficient or struggle to accurately identify microbes in difficult matrices such as boot or fecal swabs, carcass rinsates and processed products like broths and MDM.

## THE SOLUTION

### Robust, accurate microbial detection tool

Invisible Sentinel's game-changing technology, VeriFlow®, combines proven diagnostic principles for microbial detection and innovative, first-in class scientific approaches. The result is a robust platform that performs at the highest level of accuracy.

VeriFlow detection tools are widely used to monitor quality in the food and beverage industry. Through industry development partnerships and collaborations, Invisible Sentinel has tailored their assays to the needs of quality professionals and has generated extensive on-site validation data demonstrating the robustness of the technology.

Invisible Sentinel has placed specific emphasis on partnering with poultry processors. VeriFlow® has been proven to provide a high level of accuracy, especially when testing difficult matrices such as boot swabs, carcass rinsate at re-hang and post-chill, mechanically deboned meat, fat and pure broth.

The technology is easily deployed on-site allowing you to find issues early, take corrective action, and prevent large-scale contamination. In this highly competitive industry, VeriFlow supports operating and cost efficiencies with low upfront capital cost, unrivaled ease of use, minimal hands-on time, and the fastest time to results in the market.

- ▶ Unsurpassed reliability across a wide spectrum of microbes
- ▶ Robust detection in both simple and complex matrices
- ▶ High level of sensitivity and accuracy ensures confidence in your testing program
- ▶ Reduces hold times and eliminates the need to ship at risk

### VERIFLOW DNA SIGNATURE CAPTURING TECHNOLOGY

<b>DNA Amplification</b>	Proprietary reagents eliminate need for sample purification
<b>DNA Identification</b>	Proprietary DNA signature detection specifically targeting food pathogens
<b>Visualization of Results</b>	Proprietary vertical flow mediated visualization of results for easy interpretation

Target	Time to Results	Matrices	Approvals/Validation
VeriFlow® <i>Salmonella</i> species	18 hours	Raw and cooked poultry, poultry carcass rinsates, environmental surfaces (including stainless steel, sealed concrete, plastic and ceramic tile) milk, hot dogs, deli meats, fish, nut butters, confectionery products, spices, whey protein powder	
VeriFlow® <i>Campylobacter</i>	24 hours	Poultry carcass rinsates	
VeriFlow® <i>Listeria monocytogenes</i>	24 hours	Cooked poultry, environmental surfaces (including stainless steel, sealed concrete, plastic and ceramic tile) milk, hot dogs, deli meats, fish, confectionery products	
VeriFlow® <i>Listeria</i> species	24 hours	Environmental surfaces (including stainless steel, sealed concrete, plastic and ceramic tile) milk, hot dogs, deli meats, candies	
VeriFlow® <i>Campylobacter</i> Q (coming soon)	3 hours	For quantification of <i>Campylobacter</i> without enrichment in poultry carcass rinsates, boot swabs, and cecal samples	Various government and industry partners

## RAPID, ROBUST DETECTION THROUGHOUT THE POULTRY PRODUCTION PROCESS

PROCESSING → COOKING → PACKAGING → FACILITY → BY-PRODUCTS

# A suite of detection tools for your quality management program

- ▶ Unmatched specificity
- ▶ Unrivaled sensitivity
- ▶ Unsurpassed ease of use



## FOOD SAFETY PORTFOLIO

*Salmonella* species  
*Campylobacter*  
*Listeria monocytogenes*  
*Listeria* species  
*E.coli* O157:H7  
 STEC

## Coming Soon

*Campylobacter* Q  
*Salmonella* Q  
*Staphylococcus aureus*

For more information or to place an order, please contact Invisible Sentinel at 215.966.6118 or [www.invisiblesentinel.com](http://www.invisiblesentinel.com)

## STANDARD TEST PROTOCOL

### START

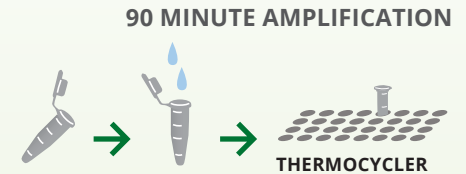
#### ENRICH

After 18-24 hours enrichment, transfer 500 µl sample to provided 1.5 ml tube. Heat sample for 10 minutes, then allow to cool to room temperature.



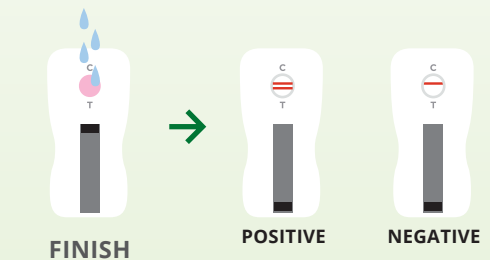
#### AMPLIFY

Transfer 5 µl of heat inactivated sample into provided reagent tube. Place tube into thermocycler and run program.



#### DETECT

Remove reagent tube from thermocycler. Dispense reagent tube contents onto test cassette window. Wait 3 minutes and retract test cassette to reveal test results. One line indicates a negative result, two lines indicate a positive result.



ITEM #	DESCRIPTION	SIZE
<i>Salmonella</i> species - IS1005 <i>Campylobacter</i> - IS1001 <i>Listeria monocytogenes</i> - IS1002 <i>Listeria</i> species - IS1004 <i>E.coli</i> O157:H7 - IS1006 STEC - IS1007	 Veriflow Complete Test System Includes: Mastermix Reagents, Cassettes, 1.5 ml Sample Tubes, Media	1 Kit 24 Tests
ISTC002	 Veriflow Thermocycler	1 Unit
IS0904	 Veriflow Loading Tray	1 Unit

Invisible Sentinel, a global molecular solutions company, is dedicated to providing first-in-class microbial detection tools. The company's core technology, Veriflow, is a patented, game-changing platform that integrates molecular diagnostics, antibody design, and immunoassays. Veriflow has been applied across multiple industries including food safety and beverage quality.

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