

Food testing

Rapid *Salmonella* detection and serotyping in poultry

Detect. Identify. Assess.



Simplicity

Simple sample preparation step provides scalability for higher throughput



Speed

Detect and identify *Salmonella* species, Typhimurium, Enteritidis, and Infantis, with sample-to-results in under 18 hours



Accuracy

Robust solutions with high sensitivity, specificity, and reliability

A simple solution for improved risk assessment and management of *Salmonella* in poultry production

For the detection of *Salmonella* spp. and identification of the top three serotypes in poultry products, the Thermo Scientific™ SureTect™ *Salmonella* species Multiplex PCR Assay and Thermo Scientific™ SureTect™ *Salmonella* Infantis PCR Assay offer a complete, automatable solution.

Every year, *Salmonella* causes up to 1 billion infections worldwide with around 155,000 deaths. In the United States, 23% of foodborne *Salmonella* illnesses are directly attributable to poultry consumption and commonly linked to three serotypes: Typhimurium, Enteritidis, and Infantis.

To reduce human cases of Salmonellosis, the poultry industry and regulators are working to understand and reduce the prevalence of *Salmonella* serotypes that are of greatest public health concern in raw poultry products.

Designed specifically for *Salmonella* control programs in poultry production, the SureTect *Salmonella* Multiplex PCR Assay, in combination with the new SureTect *Salmonella* Infantis PCR Assay, facilitate rapid and robust detection and serotyping for *Salmonella* strains of public health concern in poultry.

SureTect *Salmonella* Multiplex PCR Assay

- The first validated multiplex PCR assay for simultaneous detection of *Salmonella* species and *Salmonella* serovars; Typhimurium and Enteritidis
- Combined *Salmonella* species and serovar results from a single well
- Streamlines testing workflow and reduces waiting time for product release or intervention
- AFNOR validated and AOAC certified with both manual and automated workflows



SureTect *Salmonella* Multiplex PCR Assay





SureTect *Salmonella* Infantis PCR Assay

- Additional serotyping assay for the detection of *Salmonella* Infantis in poultry
- Complimentary to the SureTect *Salmonella* Multiplex Assay and designed to run simultaneously, requiring no additional time or data interpretation steps






SureTect *Salmonella* Infantis PCR Assay

SureTect *Salmonella* Multiplex PCR Assay method AOAC-PTM validated matrices

 30 mL chicken carcass rinse	 25 g fresh, raw poultry (also validated for 25 g of fresh, raw pork)	 Shell eggs	 375 g raw ground turkey (validated with the SureTect <i>Salmonella</i> Multiplex Flex Assay*)
--	---	---	--

SureTect *Salmonella* Infantis PCR Assay method verified matrices

 30 mL chicken carcass rinse	 375 g chicken parts	 Re-hang rinses
--	--	---

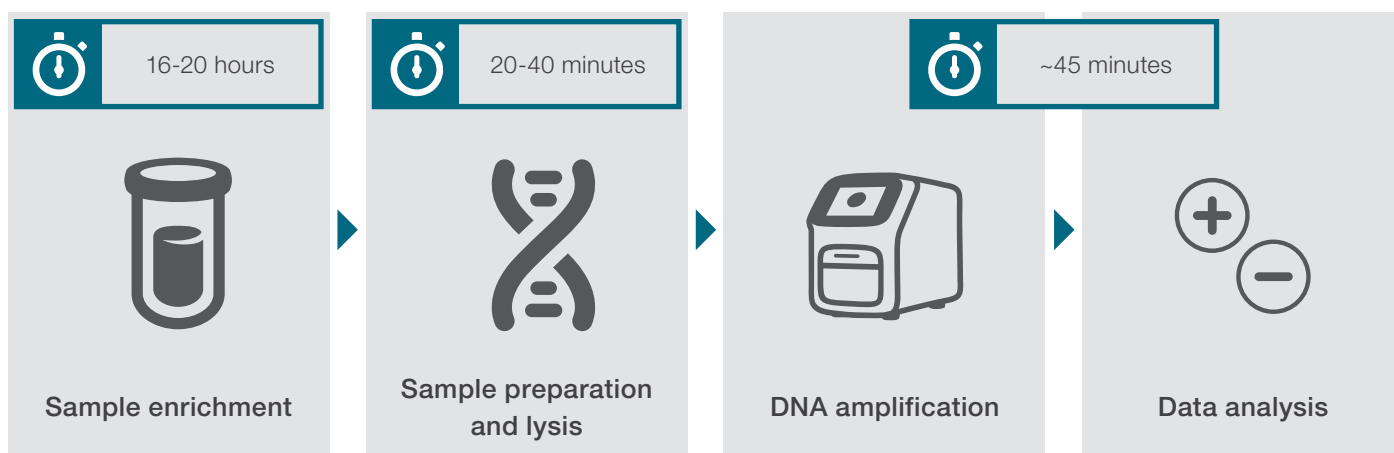
*The SureTect *Salmonella* Multiplex Flex Assay is not compatible with the SureTect Automation Platform

Harmonized workflow for streamlined poultry testing

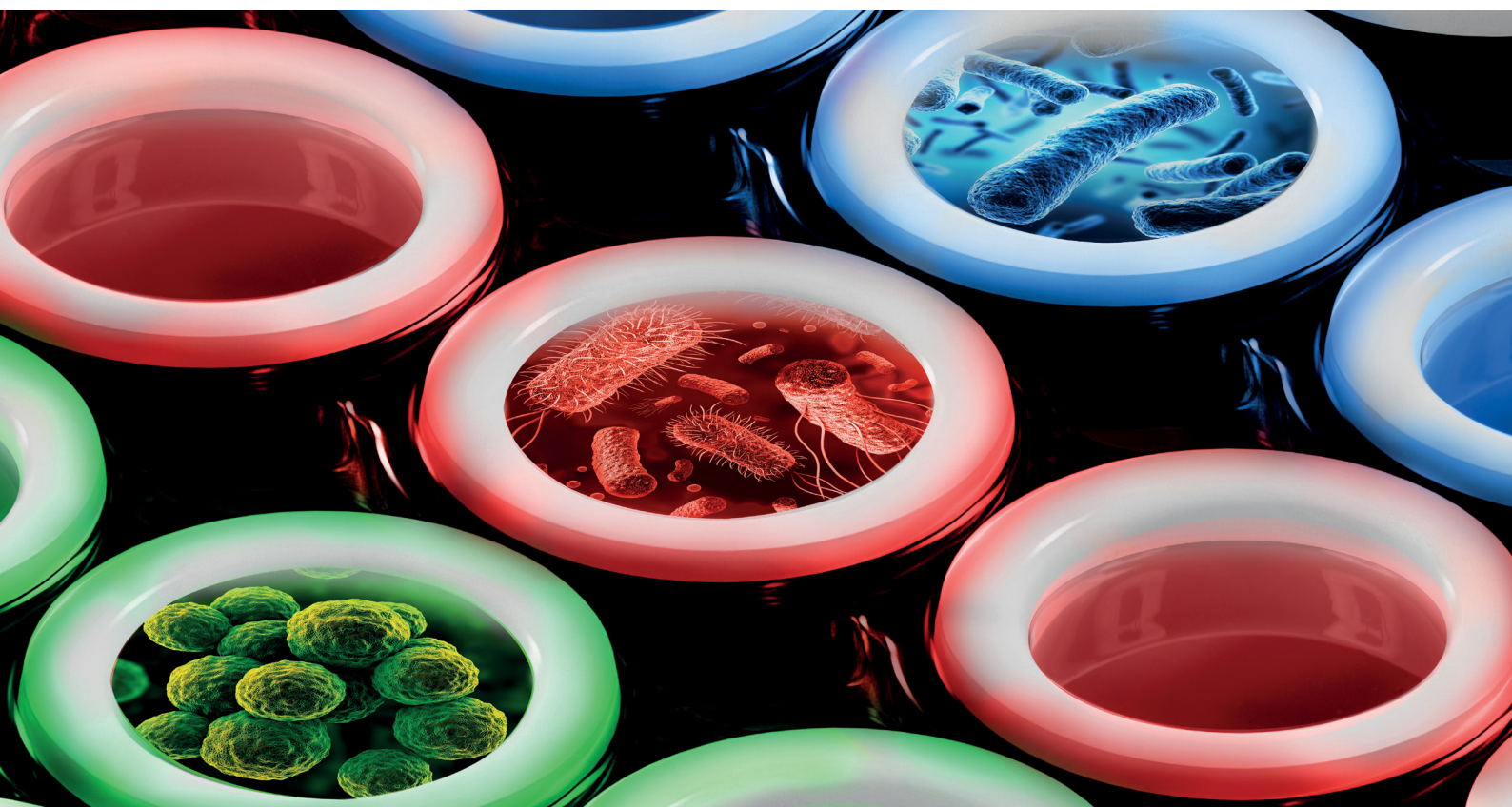
Together, the SureTect Salmonella Multiplex Assay and SureTect Salmonella Infantis Assay offer a simple, all-in-one workflow for comprehensive *Salmonella* testing in poultry production. Detect *Salmonella* species and differentiate three serotypes from a single enrichment and only two reactions in the same PCR run to get four results in one!

- Simplified and consolidated workflow that replaces traditional *Salmonella* strain typing methods
- All-in-one workflow to get same-time, accurate results: *Salmonella* spp. and the top three serotypes of relevance to poultry
- Pre-dispensed, ready-to-use and lyophilized reagents
- Open PCR instrument (Applied Biosystems™ QuantStudio™ 5 Food Safety PCR System) with capacity to process a high volume of samples
- User-friendly and LIMS compatible software
- High level of service and support

From sample-to-result in under eighteen hours:



Confirmation via traditional or chromogenic media (full suite of solutions available)



Your *Salmonella* control partner

Best-in-class instrumentation to support your testing needs

Whether you are testing in-house or are a contract testing laboratory, our team of microbiology experts are ready to provide the technical expertise and best-in-class instrumentation to power up your *Salmonella* PCR testing program.

SimpliAmp Thermal Cycler

Utilize the Applied Biosystems™ SimpliAmp™ Thermal Cycler to automatically prepare lysates from enriched samples ready for PCR.

By automating the incubation steps for cell lysis, samples are ready for PCR in less than 20 minutes with minimal hands-on steps required.



QuantStudio 5 Food Safety Real-Time PCR System

The SureTect PCR Assays are validated to run on the QuantStudio 5 Food Safety Real-Time PCR System.

The QuantStudio 5 Food Safety PCR System is a high-performance bench-top platform, combining ease-of-use and system connectivity with powerful options that enable maximum data utility and control.



Automated sample preparation for your poultry workflow

With the Thermo Scientific™ SureTect™ Automation Workflow, you can take your *Salmonella* testing to the next level with automated lysis and PCR sample preparation.

Utilizing the CyBio™ FeliX Instrument, the automated workflow with rapid setup allows you to reduce hands-on time whilst increasing the accuracy of your testing, enabling your technicians to focus on other tasks.

With a user-friendly interface and innovative yet compact dual deck design, the CyBio FeliX instrument enables efficient, accurate lysis and PCR preparation whilst saving valuable bench space.

Designed for use with the SureTect *Salmonella* Multiplex and SureTect *Salmonella* Infantis PCR Assays, the instrument's flexible programs and precise pipetting accuracy ensure maximum efficiency and reproducibility.



Time Saving

- Fully automated lysis & PCR setup
- Rapid 5-minute setup time for loading reagents



Accurate and Traceable

- Enhanced pipetting accuracy, minimizing risk of human error
- Barcoded sample entry for full traceability



Intuitive Software

- User-friendly interface
- Pre-programmed runs for quick setup



Flexible

- Up to 6 different assays/96 samples on the same run
- Choose from full or partial plate processing
- Automate lysis, PCR setup, or the complete workflow

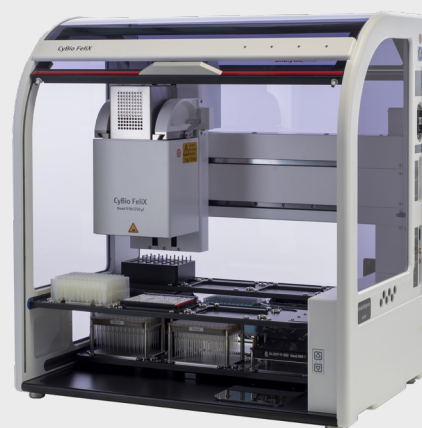


Control

- Control your consumable costs and waste with the Flex Package option, allowing you to use the Head R 96 Pipetting head for either 96-channel pipetting or 8-channel pipetting
- Be confident in your processes with the UV decontamination unit

Key benefits of the CyBio™ FeliX Instrument

- Ready-to-use, specific SureTest protocols
- Integrated heating and cooling block
- Choose between the CHOICE head for simultaneous 8-sample pipetting or the Head R 96 for 96-sample pipetting
- Unique 2-level deck
- Comprehensive service packages
- Fully validated system - AFNOR and AOAC
- Compact design:
 - Dimensions: 650 x 450 x 700 mm
 - Weight: 58 kg



Ordering information

Product	Description	Order code
SureTest Salmonella species, Typhimurium and Enteritidis Multiplex PCR Assay		A56846
SureTest Salmonella species, Typhimurium and Enteritidis Multiplex Flex PCR Assay		A56847
SureTest Salmonella Infantis PCR Assay		A56450
SureTest Workflow Starter Pack		A56898
KingFisher™ Flex Purification System with 96 Deep-Well Head	For use when preparing samples for the SureTest Salmonella species, Typhimurium and Enteritidis Multiplex Flex Assay	A56847
Automation Platform, one of the following:	Automation Platform CHOICE Head	A59017
	Automation Platform Head R 96	A66295
SureTest Automation Software	Downloadable at thermofisher.com/molecular-microbiology-software	A66373
Laptop	Laptop 3551 W10IOT19 RC	A49006
SureTest Automation Starter Pack	Automation Starter Pack:	A59905
	• Automation Lysis Tray	A59019
	• Automation PCR Adapter	A59018
	• 96-Well PCR Base	A55330
	• QuantStudio™ 5 Strip Plate Tray	A55332
	• PCR Strip Cutting Tool	A55329
	• PCR Capping Tool	A55327
SureTest Automation Flex Package*	• 96-Head 8-Channel Adapter • 40 mm Height Adapter • Waste Box • 37 mm Support x 2	A49008
Filter Tips	Filter Tips for SureTest Automation 96 (12 boxes of 96 filter tips)	A66298
	Filter Tips for SureTest Automation 8/96 (10 boxes of 96 filter tips)	A59033
UV-Decontamination Unit*	Standalone UV unit for SureTest Automation	A49009
Sample Enrichment Tubes	4800 samples	A59902
Enrichment Tubes Caps	4800 samples	A59903
Waste Bags	Waste Bags for SureTest Automation (50 bags)	A59034
Protective Plate	Protective plates for SureTest Automation (50 plates)	A66299
QuantStudio 5 Food Safety PCR System (96-well, 0.1 mL block) with laptop and RapidFinder Analysis Software		A36328
QuantStudio 5 Food Safety PCR System (96-well, 0.1 mL block) with desktop and RapidFinder Analysis Software		A36320

*Optional Accessory

Refer to the appropriate SureTest PCR Assay instructions for use (IFU) for full details. IFUs can be found by visiting thermofisher.com and entering the Assay order code into the search window.

 To find out more about the Thermo Scientific SureTest PCR System visit thermofisher.com/suretest

thermo scientific