

Food testing

Salmonella control you can count on.

Thermo Scientific™ SureCount™
Salmonella species, Typhimurium and
Enteritidis Multiplex Kit method

Rapidly quantify three *Salmonella* targets in one PCR test

Thermo Scientific™ SureCount™ *Salmonella* species, Typhimurium and Enteritidis Multiplex Kit method

- Designed as a tool to evaluate and improve *Salmonella* control programs in meat and poultry production
- Simultaneous differentiation and quantification of *Salmonella* species and *Salmonella* serovars: Typhimurium and Enteritidis
- Enables the differentiation and accurate estimated quantification of three *Salmonella* contamination targets in a single shift.
- Increases lab efficiency and cost savings by replacing traditional enumeration and *Salmonella* strain typing with a single rapid PCR test
- According to the AOAC-PTM validation study, the method is able to quantify 1 CFU per tested poultry rinses, raw meat and poultry samples (chicken carcass rinses, ground beef, ground pork and ground turkey).



Simplify your laboratory workflow for *Salmonella* quantification and typing

The SureCount *Salmonella* Multiplex PCR Kit workflow offers a simple, all-in-one solution for *Salmonella* quantification and differentiation of *Salmonella* species as well as two of the most prevalent serotypes found in meat and poultry matrices.

Speed

Quantify three *Salmonella* targets within a single shift

Simplicity

Simple sample preparation provides scalability

Automated Results

RapidFinder Analysis Software v2.0 or later reports count for all three targets

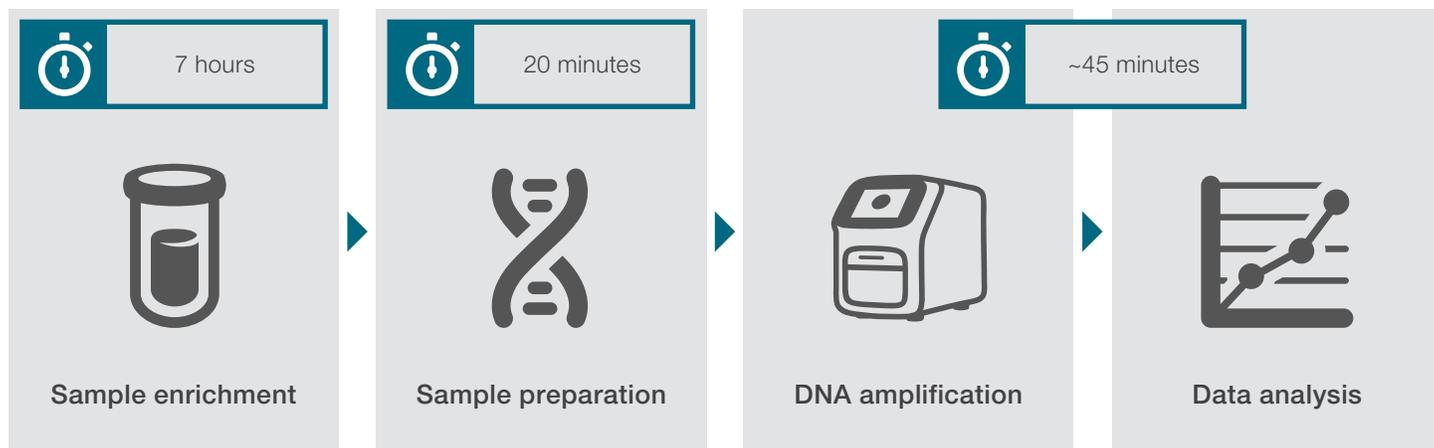
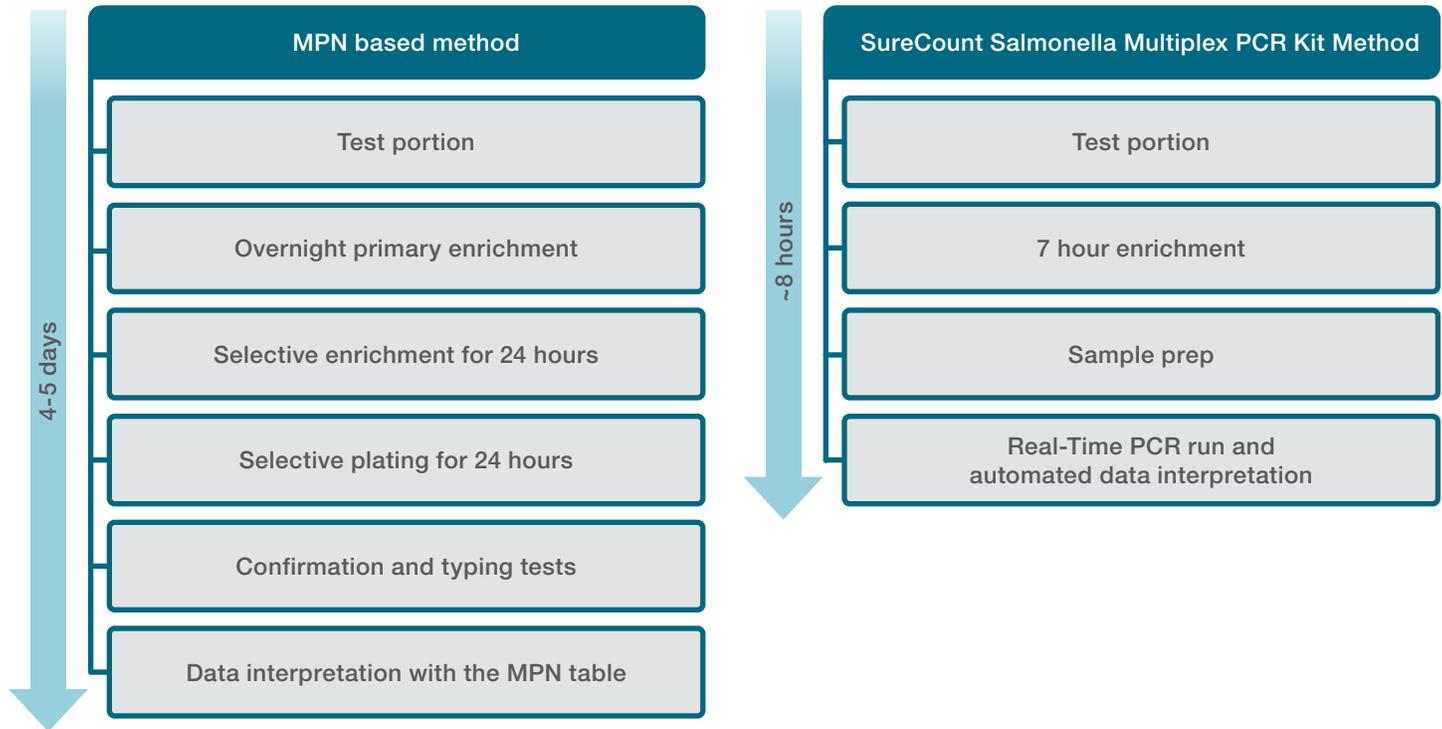


Figure 1. The SureCount *Salmonella* Multiplex PCR Kit method offers a simple workflow with fully automated reporting.

A quicker path to enabling effective *Salmonella* control

Offering significant time-savings and reduced hands-on time over traditional MPN methods, the SureCount Salmonella Multiplex PCR Kit method enables the differentiation and accurate

estimated quantification of *Salmonella* species, Typhimurium and Enteritidis contamination in a single shift.

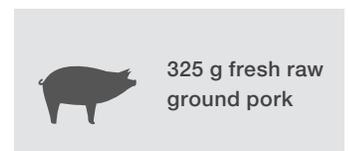
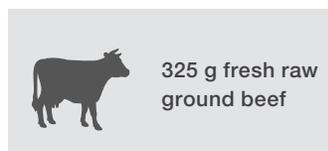
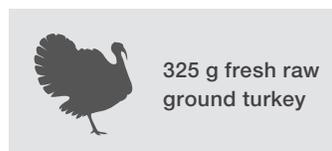


PCR workflows for meat, poultry and primary production environment samples

The SureCount Salmonella Multiplex PCR Kit method has recently been evaluated against the FSIS-MLG Chapter 4.11 and Appendix 2.05 reference methods for the isolation, identification and enumeration of *Salmonella* spp, Enteritidis and Typhimurium, adhering to AOAC Appendix J guidelines with protocols and automated data analysis for meat (fresh raw ground beef and fresh raw ground pork) and poultry finished goods (fresh raw ground turkey and chicken carcass rinses) - AOAC *Performance Tested Method*SM (PTM) certification pending.

Protocols for raw chicken part rinses, in-production carcass rinses and boot socks have also been verified.

The SureCount Salmonella Multiplex PCR Assay Kit can also be used for the SureCount Salmonella MPN method for quantification of *Salmonella* spp. Typhimurium and Enteritidis after primary enrichment according to the FSIS-MLG Chapter 4.11 (no selective enrichment step required) providing results in a 24-hour timeframe, which is up to three days faster than the reference MPN method.



Applied Biosystems SimpliAmp Thermal Cycler

Utilize the Applied Biosystems™ SimpliAmp™ Thermal Cycler in the SureCount Salmonella Multiplex PCR Kit method for sample preparation, enabling workflow efficiency and reduced handling steps.

The SimpliAmp Thermal Cycler is an easy-to-use, compact, and accurate thermal cycler designed to fit every lab's essential PCR workflow.

With a responsive color touchscreen and VeriFlex™ temperature control technology the SimpliAmp enables simple, accurate optimization in addition to cloud enablement, giving you the freedom to design and securely upload your methods, monitor runs, and check instrument availability from any mobile device or desktop computer with the Connect Platform.

Intuitive interface

- Large, easy-to-use color touchscreen for easy programming and quick status checks
- VeriFlex Block—Three independent temperature zones for PCR optimization
- Cloud-enabled—Conveniently access your instrument anytime, anywhere with the Connect Platform
- Compact design—Helps save valuable bench space



Applied Biosystems QuantStudio 5 Food Safety Real-Time PCR system

The SureCount Salmonella Species, Typhimurium and Enteritidis Multiplex PCR Kit is validated to run on the Applied Biosystems™ QuantStudio™ 5 Food Safety Real-Time PCR system.

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

Benefit from the flexibility of a 6-channel, 96-well, cloud-enabled open platform suitable for running our full range of PCR solutions for food safety, authenticity, and quality testing.

- Intuitive and easy-to-use for all levels of experience. Touchscreen usability, allowing you to stay connected to your data easily
- Multiplex with ease—up to six excitation and six emission filters offer 21 different color combinations, allowing a broad range of detection chemistries and maximum multiplexing
- Get up and running quickly—factory-calibrated for accuracy, quick installation, and immediate use; preoptimized protocol templates help minimize training for new users
- Maximize benchtop space—compact instrument can be configured as a stand-alone or with a computer
- Open instrument - suitable for all our food safety, authenticity, and quality PCR tests - Intuitive, user-friendly software, avoiding subjective interpretation - Cloud-enabled, offering the potential for data sharing, analysis and trending - Capacity for processing several hundred samples a day



Automated reporting with Thermo Scientific RapidFinder Analysis Software

An integral part of the SureCount Salmonella Multiplex PCR Kit workflow, the Thermo Scientific™ RapidFinder™ Analysis Software, is a graphical, easy-to-use tool for food and environmental testing labs to optimize their pathogen detection workflow.

The RapidFinder Analysis Software provides quantitative results with the number of colony forming units (CFU) per sample reported for all three *Salmonella* targets at conclusion of the run with no further analysis required by the operator.

RapidFinder Analysis Software enables:

- Intuitive sample set up
- Flexible plate layout including automatic or customisable options
- Pre-set, optimized thermal cycling conditions per target
- Automatically generates colour coded results (presence or absence of the target)
- Automated quantification and species differentiation utilizing the SureCount Salmonella Multiplex PCR Kit



Your *Salmonella* control partner

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

Product	Format	Order code
Enrichment media		
Thermo Scientific™ Oxoid™ Buffered Peptone Water	500 g makes 25 L	CM0509B, CM1211B or equivalent performing
Thermo Scientific™ Oxoid™ Novobiocin Selective Supplement	10 x 10 mg	SR0181E or equivalent
Thermo Scientific™ Oxoid™ Modified Trypnone Soya Broth	500 g makes 15.2 L	CM0989B
PCR assay		
ThermoScientific™ SureCount™ Salmonella Species, Typhimurium and Enteritidis Multiplex PCR Kit	96 tests	A56848
Confirmation products (for species <i>Salmonella</i> species confirmation)		
Thermo Scientific™ Oxoid™ Brilliance™ Salmonella Agar	1 pack of 10 plates	PO5098A (North America) R110374 (Outside North America)
<i>Brilliance</i> Salmonella Agar Base	500g (makes 9.3 L)	CM1092B
<i>Brilliance</i> Salmonella Selective Supplement	10 vials each for 500 mL	SR0194E
Thermo Scientific™ Oxoid™ Salmonella Test Kit (latex test)	100 tests	DR1108A
Thermo Scientific™ Remel™ Agglutinating Sera (for serotype confirmation)		
Salmonella O Factor 4 (Group B)	2 mL	R30956901
Salmonella H (i)	2 mL	R30161601
Salmonella H (1,2)	2 mL	R30163301
Salmonella O Factor 9 (Group D)	2 mL	R30957301
Optional consumables		
Thermo Scientific™ Domed Lysis Caps	120 x 8 well strips	A56895
Thermo Scientific™ 96-well Pierceable Seals	100 x 8 strip caps	A55331
Applied Biosystems™ SimpliAmp™ Strip Plate Tray Cover (optional)	1 pack of 10 covers	A55971
Instrumentation		
Applied Biosystems™ SimpliAmp™ Thermal Cycler	1 instrument	A24811
Applied Biosystems™ QuantStudio™ 5 Food Safety Real-Time PCR Instrument with Thermo Scientific™ RapidFinder Analysis v3.0 or later	1 instrument	A36328 (laptop) A36320 (desktop)
Workflow tools		
Thermo Scientific™ SureTect™ Tools Starter Pack PCR Strip Cutting Tool, PCR Strip Capping Tool, PCR Strip Uncapping Tool, 96-well PCR Base, SimpliAmp Strip Plate Tray, QuantStudio 5 Strip Plate Tray, ABI 7500 Fast Precision Plate Adapter, SimpliAmp strip plate tray cover, MicroAmp Adhesive Film Applicator and Lysis tube caps–domed		A56898

 To find out more contact your representative or visit
thermofisher.com/surecount-salm

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