

Food testing

SmartNotes

Notes on future-proofing your lab:
Getting the most out of your PCR platform

Future-proof your lab with Thermo Fisher Scientific: Because who knows what's around the PCR corner?

None of us know what the future might hold – but we can help you to ensure your laboratory is ready for whatever might be around the PCR corner.

The Thermo Scientific™ SureTect™ PCR Food Safety System not only gives you a fast, accurate foodborne pathogen testing workflow, but it also offers everything you need to enable your future food testing operations.

As a leader in PCR innovation, we offer you the gold standard in real-time PCR instrumentation. With our Applied Biosystems™ real-time PCR platforms, you get true value with excellent performance, reliability, and world-class support.

The SureTect System utilises the flexible, Applied BioSystems™ QuantStudio™ 5 Real-Time PCR Instrument, a laboratory workhorse providing the modern food-testing lab with a platform on which they can run tests for multiple targets, whether it be for the detection of pathogens, non-pathogens, specific food species GMO sequences, or even bespoke applications.

What's more, by working with us, you are hooked into a global powerhouse of scientific and regulatory expertise, dedicated to helping you and your team strengthen and protect your business, both now and in the future.

Read on to find out how Thermo Fisher can help you meet your current and future PCR needs, whatever they might be. Because in a dynamic world, you need a flexible, future-proof solution.

PCR technology in the food testing lab

Thanks to its speed and accuracy, PCR has become the mainstay of pathogen testing in food laboratories in recent years.

The validated SureTect PCR System, which returns robust results between three and six days faster than traditional techniques via a simplified, productivity-boosting workflow, will meet today's food laboratory needs. But how can you be sure that it will meet the needs of tomorrow?



The QuantStudio 5 Food Safety PCR Instrument

All Thermo Scientific™ food testing PCR Assays, including the SureTect and RapidFinder™ PCR Assays for pathogen detection, are designed to run using the QuantStudio 5 Food Safety PCR System, a flexible foundation for all your current and future PCR demands.

It's an open system of a real-time PCR thermal cycler and software with multiple applications possible, meaning it can accommodate any PCR requirement, including detection of pathogens, GMO sequences or food species identification for example, and can provide qualitative, quantitative, or semi-quantitative results, depending on your laboratory's needs. It can even be programmed to run bespoke PCR assays.

The Thermo Scientific™ RapidFinder™ Analysis Software which is supplied ready to run the QuantStudio 5 PCR Instrument automates set-up and result interpretation of the SureTect and RapidFinder foodborne pathogen detection Assay workflows for ultimate simplicity.

With six channels and VeriFlex™ Zones for precise temperature control, the QuantStudio 5 Instrument has the ability to unlock the potential of your workflows by making it possible to run highly multiplexed assays, for detection of multiple targets in a single test, in a rapid turnaround time. It's this advanced PCR technology which has been exploited in Thermo Scientific pathogen detection assays such as the SureTect™ E. coli O157 and STEC PCR Detection Assay and the Thermo RapidFinder™ Salmonella species, Typhimurium and Enteritidis Multiplex PCR Assay.

This streamlined instrument and software are easy-to-use, making the System perfect for those who are looking for a simple, reliable, and affordable real-time PCR platform that doesn't compromise on performance or quality.

It all adds up to maximum flexibility with minimal equipment downtime. The QuantStudio 5 Food Safety System isn't just the thermal cycler for your pathogen detection workflows it's a workhorse with the ability to adapt to your laboratory's changing needs.

Industry-leading expertise

In addition to providing accurate, fast, easy-to-use Assays, and a flexible, open system, Thermo Fisher provides access to a hub of industry-leading scientific and regulatory expertise.

Working with us means you can be sure of continual investment in both anticipating and meeting your future needs.

During the recent AOAC-OMA validation process, for example, we expanded the Thermo Scientific™ SureTect™ Salmonella Species PCR Assay validation scope to include large, 375 g samples of ground beef, beef trim, and spinach, in line with changing industry practices.

Indeed, whenever relevant, our methods are ISO 16140-2 and AOAC validated with large test portions as well as a short time to result to fit with food production shifts. Today, we offer one of the most comprehensive PCR assay portfolios for food testing.

What's more, our teams are continually scanning the regulatory horizon, to make sure you have everything to remain compliant in an ever-changing world.

And for those more bespoke adaptations, our network of experts is on-hand to help design workflows, assays, and processes, as your needs evolve.

A future-proof system

All-in-all, the SureTect PCR System is more than a suite of food pathogen assays. It's your ticket to an entire ecosystem of technology and support that will help to future-proof your laboratory.

We might not know what tomorrow will bring but, together, we can be ready for whatever it does.

 To find out more about the food testing Applied Biosystems QuantStudio 5 Food Safety System and Thermo Scientific SureTect System visit thermofisher.com/suretect

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