



TAAG

PRODUCT CATALOG

INDUSTRIAL APPLICATIONS 2025

Overview

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Note: Due to differing product timelines, some new items in this catalog may not be immediately available for purchase, and certain products may not be available in all countries. Additionally, some older products may have been discontinued since the catalog's publication. For the most up-to-date information, please contact your local TAAG sales representative or visit [TAAG-tech.com](https://www.taag-tech.com).

TAAG

TAAG is a biotechnology company with [over 20 years experience](#) with operations in United States, Belgium, Chile and Mexico.

Our expertise focuses primarily on the design, development, and implementation of [molecular biology solutions](#) to

address industrial challenges.

Our business model is not merely transactional; we firmly believe in the [power of partnerships](#). Rather than acting as a simple supplier, we see ourselves as an extension of our partners' Research and Development teams, creating

customized solutions that grant them a competitive edge in their respective markets.

This [collaborative approach](#) has enabled us to form [successful alliances](#) with some of the major companies worldwide.

TAAG

Our Mission

Make advanced molecular testing accessible to every laboratory and organization, our partners, revolutionizing how microorganisms are detected and managed.

Our Vision

Redefine global microorganism detection by setting the standard for accessible, state-of-the-art molecular diagnostics, empowering our partners, across every industry, to achieve the highest levels of safety and health.

What sets us apart



Highly focused on spoilage microorganisms' detection and identification

Identification of spoilage microorganisms is critical to have more accurate product release specifications, avoiding recalls and additionally avoiding holding good products. Our **Specio™** kit line, using the new technology **KAi™** (patent pending), are the only qPCR kits in the world to detect and identify dozens of spoilage microorganisms simultaneously.



High multiplex PCR kits for pathogens

Mila™ (patent pending) is our proprietary AI software that pinpoints the ideal molecular components for creating exceptionally accurate, highly multiplexed qPCR kits. By integrating Mila's predictive power into our **Ampliora™** product line, we develop multiplex PCR kits that detect and identify multiple pathogens in a single reaction—boosting productivity and reducing overall costs.



The fastest microbiological results

AiGOR™ (patent pending) is a revolutionary technology that increases PCR sensitivity by 10,000-fold, delivering faster and more accurate results than ever before. Integrated into our **Elevia™** kit line, AiGOR technology dramatically reduces—and in some cases eliminates—the enrichment step, enabling results up to eight times faster than standard qPCR methods.

What sets us apart



Customized solutions

Introducing **Nascence™**, our new custom development service that leverages all our advanced technologies to create highly tailored molecular assays with unparalleled precision and efficiency. Once developed, we can either supply the developed assay directly to your lab or run it through our laboratory network. In most cases, assay development is offered at no cost.



Application centers

While AOAC and similar accreditations are valuable benchmarks, they're limited to standard matrices and controlled conditions. We address this gap by providing free, intensive validation in your unique sample types—ensuring our kits perform accurately and reliably under your real-world conditions.

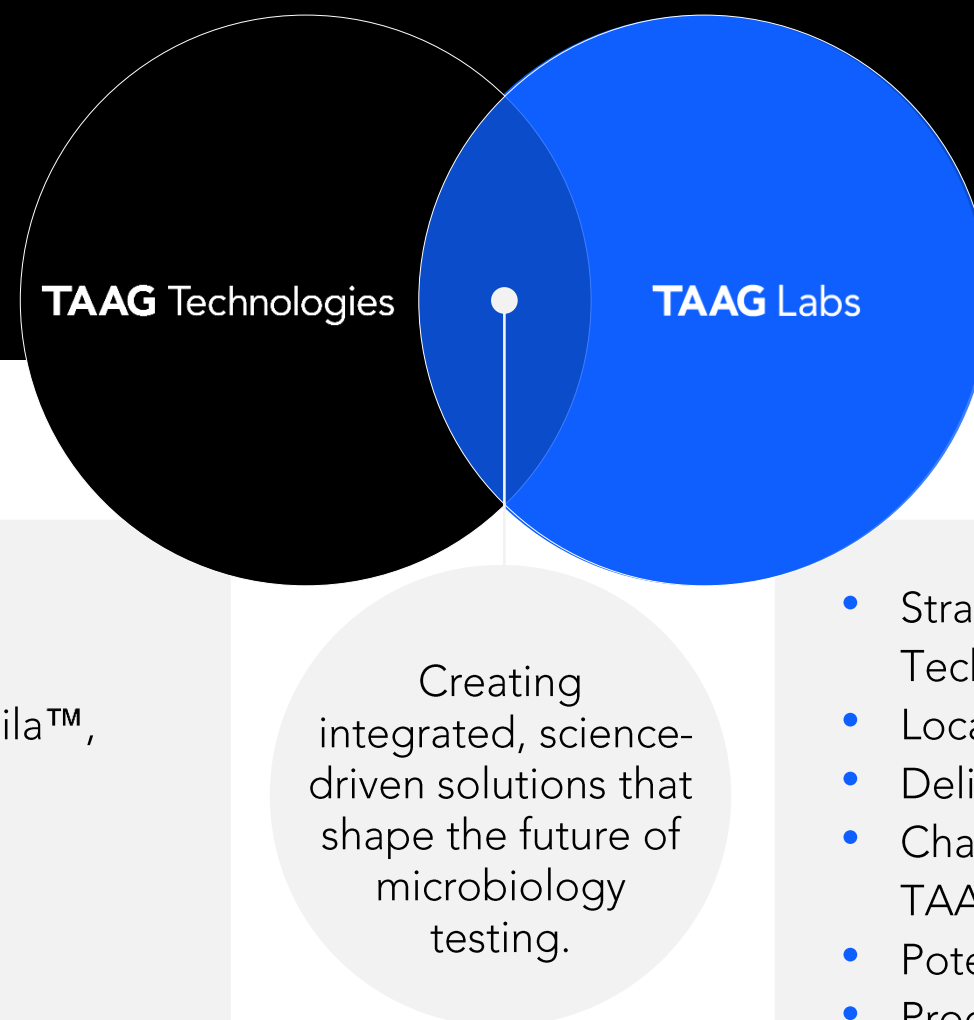


Laboratory services

Supplementary laboratory services with our kits. We are the only biotech manufacturer that provides advanced lab services—such as NGS—alongside our kits, ensuring deeper insights and more informative results.

TAAG group

TAAG Group is an ecosystem of companies working in synergistic harmony to deliver the best collaborative work to our clients. With TAAG Technologies leading the development of new products and technologies, and TAAG Labs as a local partner and representative.



- Global research, development and innovation hub
- Creator of patented technologies (Mila™, AiGOR™, KAi™)
- Product design and optimization
- AI development

- Strategic commercial representatives of TAAG Technologies
- Local presence and customer relationship
- Deliver PCR kits and lab services to industry
- Channel market needs and trends back to TAAG Technologies
- Potential for on-site and rapid implementation
- Product application centers

Our Business Model, Built Around Your Needs

We take a comprehensive and consultative approach with our partners. We follow three simple steps to better assess how to better support them and help them with their specific needs.

How we deliver value

Lab services

Microbiological diagnostics performed in TAAG Labs for companies without in-house labs.

Kit & product sales

Proprietary AI-powered kits (Mila™, AiGOR™, KAi™) sold through TAAG Labs or authorized distributors.

Tailored Kit Development

Custom-designed kits built for your target microorganisms, integrating the TAAG technology that best fits your needs.

Partnering Framework

01 - Discovery stage

We begin by deeply understanding your microbiological challenges, goals, and operational context.

02 - Project outline stage

Together, we define what's needed, what's possible, and co-create a solution framework.

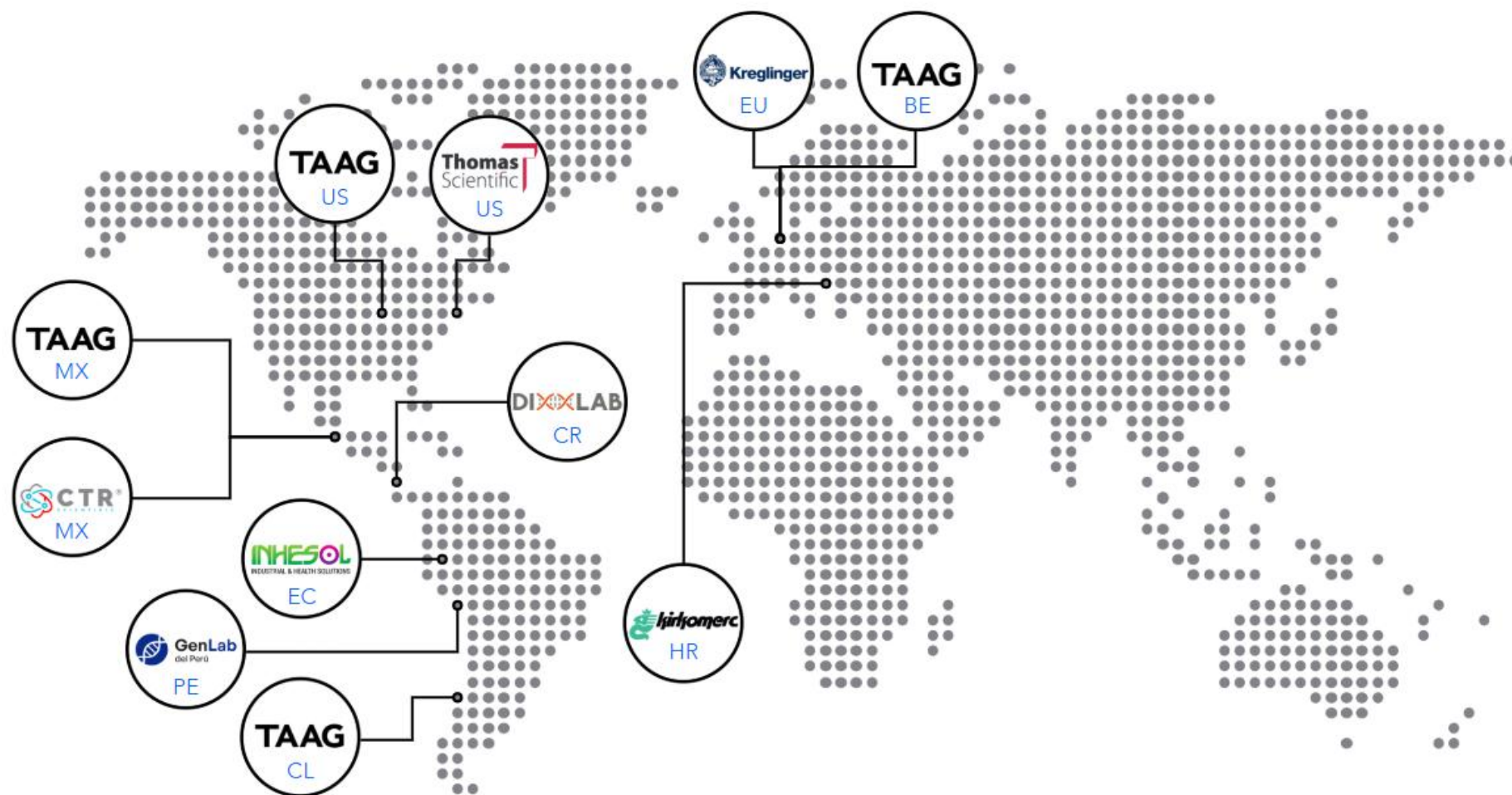
03 - Value Proposal stage

We present a tailored commercial proposal with the most suitable product, service, or development from our portfolio.

We don't sell; we solve. Every collaboration begins with listening and grows through shared success.

Our international presence

Through the expansion of our TAAG Labs, along with a growing network of trusted distributors, we've been able to bring our solutions closer to our clients worldwide. We don't see these as simple sales channels, but as **long-term strategic partnerships**. Each relationship is built on shared goals, mutual growth, and a **commitment to delivering scientific excellence at a global scale**.



TAAG

A few words from our CEO

"TAAG was born from curiosity, and a relentless pursuit of excellence. We didn't inherit this company; we built it with our own hands, guided by science, discipline, and a deep respect for our craft. Every protocol we designed, every PCR kit we launched, and every technology we developed came from years of study, trial, and unwavering commitment. It was by no means an easy journey, but we managed, thanks to the dedication and commitment of our team. But our true ambition goes beyond innovation. It is because we have been witnesses of what bonds can produce, that we believe in creating relationships that endure, transparent and rooted in trust. We don't see our clients as transactions to be closed, but as partners to grow with. Our goal is not to prescribe a solution, but to walk beside you, as a diagnostician and a therapist does with their patient; committed, present, and fully invested in your success. That's what drives us forward: building something that lasts, together."



Meet our team

At TAAG Labs, our people are more than representatives; they are microbiology consultants, local allies, and scientific partners. Each team embodies TAAG's spirit of professionalism, innovation, and care, helping transform challenges into tailored solutions for our clients.

Laura
Rivero



CHILE

Laura is responsible for leading the Global Commercial Support efforts. With a scientific background in biology, years of experience, and a strong work ethic, she has the knowledge to ensure TAAG clients the successful implementation, new developments, products, and services, with a strong focus on building long lasting partnerships with our partners.

Robert
Lee



USA

After several years working and building a robust partnership with TAAG's co-founders, Robert joined TAAG Labs to ensure legal and financial health of United States operation and collaborate to expand our footprint globally. Develop business in the USA through customer relations and success, having always our partners best interest at the core.

Ana
Castañeda



MEXICO

Ana leads the commercial efforts in South America, being responsible for TAAG's presence in the region. Her experience in the food industry has allowed her to understand our partners problems and need and better address them. Ana has dedicated her career in TAAG in building strong relationship with different type of partners, from distributors to product and services users.

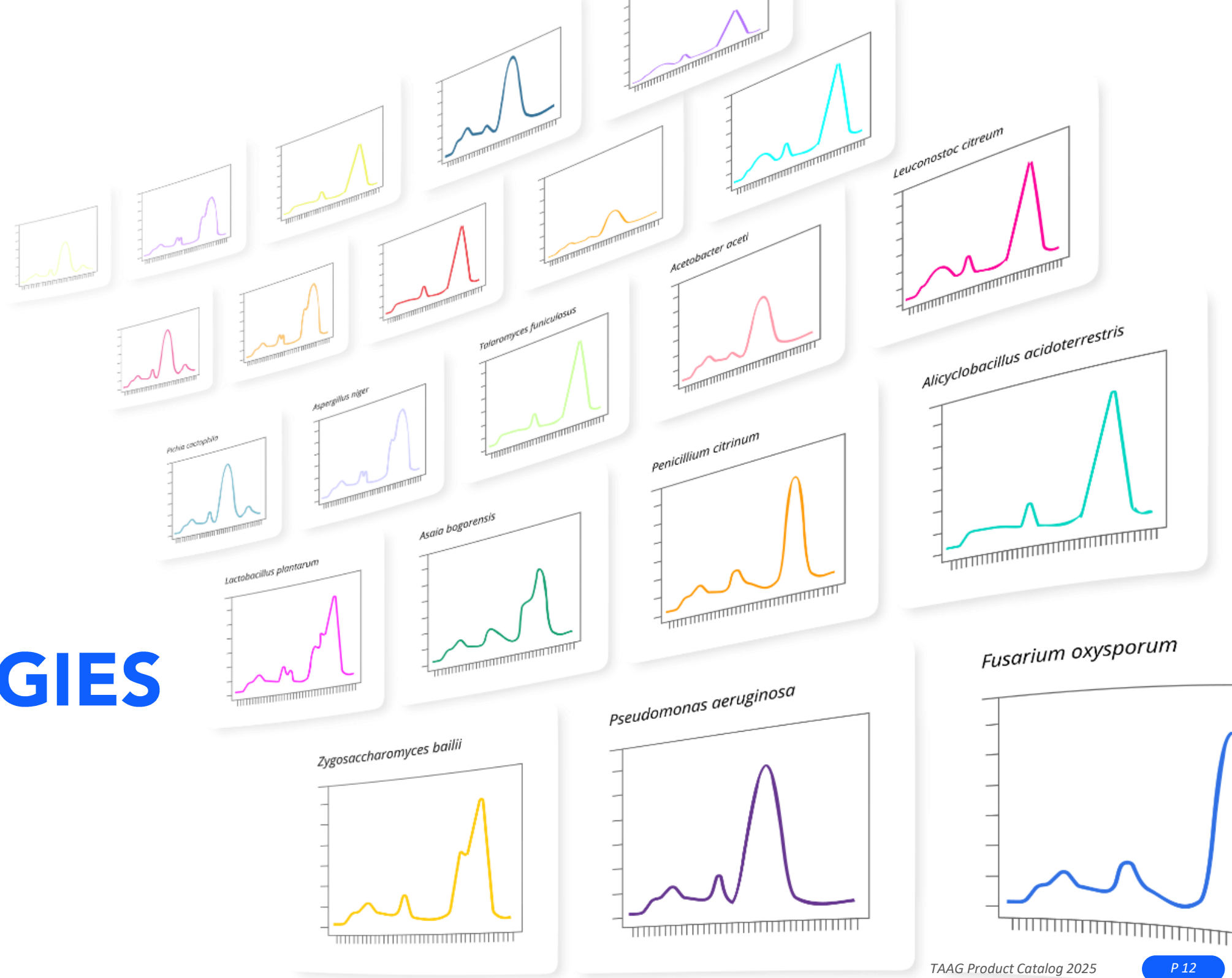
Oscar de
Schaetzen



BRUSSELS

Oscar has experience in strategic planning, global purchasing, business development, and entrepreneurship, which allows him to manage and strengthen our commercial relationships across Europe, promoting an innovative, integral and solidary culture. With an entrepreneurial spirit, he helps TAAG grow in Europe and become a leader in high-quality molecular diagnostics.

TAAG TECHNOLOGIES



Our artificial intelligence-based technologies

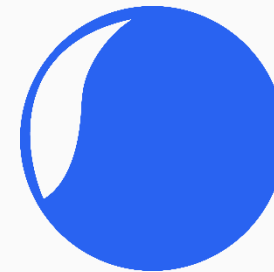
In TAAG Technologies we believe in the equalization of research and development. We believe that R&D should be accessible and swift. With this sentiment is that worked to merge artificial intelligence with molecular biology to revolutionize how biological research is applied. Traditional R&D processes often face high costs and slow progress, but our technologies can now help our clients change this everlasting paradigm. Our first-in-class platform accelerates the development of customized solutions across various applications, unlocking new levels of efficiency and throughout.

Among our groundbreaking technologies, Mila™, Elevia™, AiGOR™, and KAi™ each represent a unique breakthrough. Mila™ is the world's first AI-driven platform for designing optimal primer/probe sets, Elevia™ delivers high-throughput PCR solutions, AiGOR™ offers extraordinary sensitivity and rapid turnaround for faster, more accurate results, and KAi™ utilizes AI to interpret PCR melting curves for the rapid identification of multiple microorganisms in a single reaction. Together, these technologies empower researchers to push the boundaries of what's possible in molecular biology.

The new standard in smart diagnostics



Mila™



AiGOR™



KAi™



Finally, the PCR You Truly Need.

Beyond complexity. Beyond compromise. Welcome to the future of multiplex PCR development, powered by **Mila™** AI.

TAAG AI TECH



Mila is the first AI-driven platform worldwide that designs and selects the best primer/probe sets from millions of possible combinations. By leveraging Mila's predictive capabilities, our PCR kits achieve unmatched precision and efficiency.

For the first time, Mila makes qPCR kit customization both easy and cost-effective, ensuring you can quickly and effortlessly obtain the ideal PCR kit for any application.

Mila™ is one of our core technologies and is incorporated into both the Ampliora™ and Elevia™ kit lines. This integration ensures that each kit benefits from Mila's AI-driven primer/probe design, delivering the highest levels of precision and efficiency for a wide range of applications.

Let us make the Best Kit Possible for you

01 The best PCR assays

Mila's ability to precisely predict the ideal primer/probe set ensures you will use best PCR assay.

02 High multiplex PCR

Mila designs and selects primers and probes to avoid mutual interference, allowing extremely highly multiplex PCR assays.

03 Highest accuracy

Using Mila the highest accuracy (sensitivity and specificity) are guaranteed.

04 Fastest developments

From concept to receiving your kit, the process takes just a few weeks.



AiGOR™

Fastest results with unmatched sensitivity

Revolutionize Your Pathogen Testing with **AiGOR™** Technology

Detect pathogens as fast as 6 hours in products, and in under 3 hours on surfaces without enrichment, without outsourcing, and with 10,000x more sensitivity than standard PCR.

TAAG AI TECH



AiGOR™ is also integrated into our Elevia™ kit line, ensuring each Elevia™ kit benefits from AiGOR's extraordinary sensitivity and rapid turnaround—enabling faster, more accurate results in a variety of testing applications.

Speed and Precision at your disposal.

01 Revolutionary technology

AiGOR is a revolutionary technology that identifies highly transcribed, constant RNA sequences within the target organism and uses these sequences as templates for amplification. By leveraging the natural abundance of RNA molecules, AiGOR dramatically enhances PCR detection, increasing sensitivity by around 10,000-fold.

02 AiGOR speed

Thanks to this remarkable sensitivity, the enrichment step can be significantly reduced—or even eliminated. For instance, in environmental testing, AiGOR-based kits require no enrichment at all, delivering results in as little as three hours, compared to the 24–28 hours needed for traditional qPCR methods.

03 AiGor insights

Moreover, AiGOR supports quantitative results, enabling precise measurement and robust data interpretation across a wide range of applications.



Multiplex Power. Made Practical.

Introducing Kai™, AI-powered PCR development for high-efficiency, cost-effective solutions that deliver more with less.

TAAG AI TECH



KAI combines a specialized PCR melting curve assay with AI-driven data analysis. During the PCR step, each microorganism produces a unique melting curve. KAI's advanced software interprets the shape of these curves to pinpoint which organism is present. As a result, dozens of different microorganisms can be accurately identified in a single PCR reaction, significantly increasing throughput and efficiency.

KAI™ is also integrated into our Specio™ kit line, enabling each Specio kit to detect dozens of microorganisms in a single PCR reaction. This AI-driven approach delivers higher throughput, increased accuracy, and a more streamlined workflow.

Boosts throughput, AI ensures precision

01 High Multiplex Capacity

Quickly detect multiple pathogens in one test, saving time and resources.

02 Enhanced Accuracy

AI-based curve analysis helps minimize false results by recognizing subtle differences between organisms.

03 Streamlined Workflow

Eliminates the need for multiple separate assays, reducing both processing time and overall costs.



TAAG

PRODUCTS AND SERVICES BY INDUSTRY

Beer & Wine

In the wine and beer industry, detecting spoilage microorganisms is crucial to maintaining product quality. They can impart undesirable flavors and cause uncontrolled secondary fermentation, affecting stability and flavor profiles, or generate excessive acidity and produce off-flavors, such as sour or buttery notes, compromising the consumer experience. On the other hand, yeasts can lead to secondary fermentation and the formation of unwanted flavors, as well as cause increased gas and pressure in bottles. Detecting and controlling these microorganisms is essential to preserve the stability, flavor, and safety of wine and beer, ensuring compliance with food safety regulations and avoiding economic losses.



KEY SPOILAGE

- **Lactic acid bacteria group**
 - Lactobacillus spp.
 - Pediococcus spp.
- **Yeast**
 - Brettanomyces spp
 - Zygosaccharomyces spp.
 - Saccharomyces cerevisiae var. diastaticus

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|------------------------------|--|--------------------|
| Ampliora™ 4.3 Yeast | 89 / 106 | 28 HRS |
| Ampliora 8.1 Beer Yeast Plus | 88 / 106 | 28 HRS |
| Ampliora™ 8.2 Bacteria Plus | 91 / 106 | 28 HRS |

Beer & Wine - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|---|--------------------|-------------|------------------------------------|---|---|--|---|--|
| Spoilage testing | Brettanomyces bruxellensis Brettanomyces spp. Pichia spp. Saccharomyces cerevisiae Saccharomyces cerevisiae var. diastaticus Saccharomyces spp. Zygosaccharomyces bailii/parabailii Zygosaccharomyces group (Z. bailii/parabailii and Z. rouxii) | Kit | Beer | N/A | Augmentis 2 Wort | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora 8.1 Yeast Plus, p. 88 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">• Pichia strain typing using NGS, p. 109• Saccharomyces strain typing using NGS, p. 109• Zygosaccharomyces strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | <ul style="list-style-type: none">• TAAG BW03 Wine&Beer Advanced Yeast Check (With enrichment), p. 106; or• TAAG BW10 Wine&Beer Advanced Yeast Check (No enrichment), p. 106 | | | | |
| | Saccharomyces cerevisiae Saccharomyces spp. Zygosaccharomyces bailii/parabailii Zygosaccharomyces group (Z. bailii/parabailii and Z. rouxii) | Kit | Beer | N/A | Augmentis 2 Wort | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora 4.3 Yeast , p. 89 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">• Saccharomyces strain typing using NGS, p. 109• Zygosaccharomyces strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | <ul style="list-style-type: none">• TAAG BW06 Wine&Beer Essential Yeast Check 1 (With enrichment), p. 106; or• TAAG BW13 Wine&Beer Essential Yeast Check 1 (No enrichment), p. 106 | | | | |
| | Brettanomyces bruxellensis Brettanomyces spp. Pichia spp. Saccharomyces cerevisiae var. diastaticus | Kit | Beer | N/A | Commercial Media Wort | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora 4.4 Yeast, p. 90 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">• Brettanomyces strain typing using NGS, p. 109• Pichia strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | <ul style="list-style-type: none">• TAAG BW07 Wine&Beer Essential Yeast Check 2 (With enrichment), p. 106; or• TAAG BW14 Wine&Beer Essential Yeast Check 2 (No enrichment), p. 106 | | | | |
| | Saccharomyces cerevisiae Saccharomyces spp. Zygosaccharomyces bailii Zygosaccharomyces spp. | Kit | Wine | Membrane filter, 0.45 µm cellulose | N/A | Nucleia 4 Bacteria, Yeast and Mold, p. 75 | Ampliora™ 4.3 Yeast p. 87 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">• Saccharomyces strain typing using NGS, p. 109• Zygosaccharomyces strain typing using NGS, p. 109 |
| | | | Rinse water | Membrane filter, 0.45 µm cellulose | | | | | |
| | | | Surfaces | TAAG S13 Surface transport buffer | | | | | |
| | Lactobacillus backii Lactobacillus brevis Lactobacillus collinoides/paracollinoides Lactobacillus lindnerii Lactobacillus group (*) Megasphaera spp. Pediococcus spp. Pectinatus spp. | Kit | Beer | N/A | Lactobacillus MRS Broth | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora™ 8.2 Bacteria Plus, p. 91 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">• Megasphaera strain typing using NGS, p. 109• Pediococcus strain typing using NGS, p. 109• Pectinatus strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | <ul style="list-style-type: none">• TAAG BW02 Wine&Beer Advanced Bacteria Check (With enrichment), p. 106; or• TAAG BW09 Wine&Beer Advanced Bacteria Check (No enrichment), p. 106 | | | | |

Beer & Wine - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|-------------|----------------------------|---|---|---|---|---|
| Spoilage testing | Lactobacillus brevis Lactobacillus lindnerii Lactobacillus group (*) Pediococcus spp. | Kit | Beer | N/A | Lactobacillus MRS Broth | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora™ 4.5 Bacteria, p. 92 | Mila - Multiplex qPCR, p.14 | Pediococcus strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | • TAAG BW04 Wine&Beer Essential Bac Check 1 (With enrichment), p. 106 ; or • TAAG BW11 Wine&Beer Essential Bac Check 1 (No enrichment), p. 106 | | | | |
| | Lactobacillus backii Lactobacillus collinoides/paracollinoides Megasphaera spp. Pectinatus spp. | Kit | Beer | N/A | Lactobacillus MRS Broth | Nucleia 4 Bacteria, Yeast and Mold, p. 77 | Ampliora™ 4.6 Bacteria, p. 93 | Mila - Multiplex qPCR, p.14 | • Megasphaera strain typing using NGS, p. 109 • Pectinatus strain typing using NGS, p. 109 |
| | | Lab service | Beer | N/A | • TAAG BW05 Wine&Beer Essential Bac Check 2 (With enrichment), p. 106 ; or • TAAG BW12 Wine&Beer Essential Bac Check 2 (No enrichment), p. 106 | | | | |
| | All spoilage bacteria | Kit | Surfaces | Collectio 1 NeutroSampling | • Augmentis 11 Universal Bacteria, p. 66 ; or • Augmentis 51 Lactobacillus, p. 70 | Nucleia 3 Clean-Q, p. 76 | Specio 00.1 Bacteria, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | Lab service | Surfaces | Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Surfaces | Collectio 1 NeutroSampling | Augmentis 21 Yeast & Mold, p. 68 ; | Nucleia 3 Clean-Q, p. 76 | Specio 00.2 Yeast & Mold, p. 96 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | Lab service | Surfaces | Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Lactobacillus group (*) include: Furfurilactobacillus rossiae, Lacticaseibacillus casei, Lacticaseibacillus paracasei, Lactiplantibacillus plantarum, Lentilactobacillus buchneri y Lentilactobacillus parabuchneri.

Beverages

In the non-alcoholic beverage industry, microorganisms pose a significant challenge due to their ability to survive preservation processes like pasteurization and their resistance to chemical preservatives and low pH conditions. These microorganisms can cause issues such as acidification, turbidity, sediment formation, production of off-flavors (e.g., guaiacol in acidic juices), and undesired fermentation, which generates gas and pressure in containers, compromising product quality. Their presence alters the taste, smell, and appearance of beverages, leading to economic losses from returns and damage to brand reputation. To mitigate their impact, it is essential to implement advanced strategies such as real-time PCR microbiological monitoring, allowing early detection of these microorganisms and supporting decision-making processes.



KEY SPOILAGE

- Lactic acid bacteria group
 - Lactobacillus spp.
 - Pediococcus spp.
- Group of thermoacidophilic bacteria
 - Alicyclobacillus spp.
- Yeast
 - Zygosaccharomyces spp.
 - Brettanomyces spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--|--|--------------------|
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |
| Ampliora™ 4.7 Spoilage Low-pH Microorganisms | 94 / 106 | 10 HRS |

Beverages - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|---|--------------------|------------------------------|---|--|--|--|---|--|
| Spoilage testing | Acidophilic bacteria Brettanomyces spp. PRY(preservative-resistant yeasts) Spoilage fungi Spoilage yeasts. | Kit | Finished product | TAAG Sample bag | Potato Dextrose Broth | Magneus™ 3 Bacteria, Yeast & Mold, p. 80 | 4.7 Spoilage Low-pH Microorganisms | Mila - Multiplex qPCR, p.14 | • Brettanomyces strain typing using NGS, p. 109 • Bacteria identification using NGS, p. 109 ; or • Yeast and mold identification using NGS, p. 109 |
| | | Lab service | Finished product | TAAG Sample bag | TAAG FSP47 Spoilage Low-pH Microorganisms | | | | |
| | Zygosaccharomyces bailii Zygosaccharomyces parabailii | Kit | Finished product | N/A | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 1.7 Zygosaccharomyces bailii y parabailii | Kai - Melting curve analysis and Ai, p.18 | |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP120 Zygosaccharomyces bailii y Zygosaccharomyces parabailii, p. 106 | | | | |
| | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | • Augmentis 11 Universal Bacteria, p. 65 ; or • Augmentis 51 Lactobacillus, p. 69 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Confectionary

In the confectionery industry, early detection of key pathogens is essential for ensuring food safety. They can produce gastrointestinal infections that can contaminate products like chocolate, candies, and other sweets, especially when ingredients are not handled or processed properly. The early detection of these microorganisms is crucial not only to prevent foodborne illness outbreaks but also to comply with food safety regulations and protect the brand's reputation.

In the confectionery industry, spoilage microorganisms pose risks to product quality and safety. Yeasts can ferment high-sugar products, altering their taste and texture, while Mold that produce harmful mycotoxins, like aflatoxin, and can cause visible mold growth and spoilage in products like chocolate and candy. The latter can form heat-resistant spores that lead to fermentation and potential foodborne illness. Controlling these microorganisms is essential to ensure product quality, food safety, and compliance with industry regulations.



KEY PATHOGENS

- Salmonella spp.
- Escherichia coli
- Enterobacteria



KEY SPOILAGE

- Zygosaccharomyces spp.
- Aspergillus spp.
- Penicillium spp.
- Bacillus spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | | TIME TO RESULTS |
|--|--|-----------------|
| Ampliora F39 E. coli STEC, E. coli O157:H7 and Salmonella spp. | 84 / 106 | 28 HRS |
| Elevia 1.1 Salmonella spp. | 87 / 106 | 10 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Confectionary - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|--|---|--|---|---|--|
| Pathogen testing | Salmonella spp. | Kit | Chocolate | TAAG Sample bag; | Augmentis 91 BPW, p.71 + Potentia 1 Salmonella spp., p.72 | Magneus 1 Bacteria, p.78 + Clarixa 1 Cocoa, p.73 | Elevia 1.1 Salmonella spp., p.83 | AiGOR - Faster qPCR, p.16 | Salmonella serotyping and strain typing using NGS, p.109 |
| | | | Finished product | TAAG Sample bag; | Augmentis 91 BPW, p.71 | Magneus 1 Bacteria, p.78 | | | |
| | | | Surfaces | Captus 1 Surface, p.64 ; | N/A | Magneus 4 Zero | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Captus 1 Surface, p.64 | TAAG FSP11-25 Mono Salm spp 25g, p.106 | | | | |
| | Escherichia coli Escherichia coli O157:H7 | Kit | Finished product | TAAG Sample bag | Augmentis 14 Universal Gram Negative, p.67 | Nucleia 2 Tez-Q Plus, p.74 | Specio 2.4 E. coli and E. coli O157:H7, p.85 | Kai - Melting curve analysis and Ai, p.18 | |
| | | | Surfaces | Collectio 1 NeutroSampling; | Augmentis 31 Universal Surfaces, p.69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP28 Duplex Ecoli, p.106 | | | | |
| | Escherichia coli O157:H7 Escherichia coli STEC Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p.70 | Nucleia 2 Tez-Q Plus, p.74 | Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp., p.83 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p.109 |
| | | | Surfaces | Collectio 1 NeutroSampling; | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP37 Triplex Salm-Ecoli O157 and STEC, p.106 | | | | |

Confectionary - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|------------------------------|---|--|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | • Augmentis 11 Universal Bacteria, p. 65 ; or • Augmentis 51 Lactobacillus, p. 69 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling; | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling; | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Dairy

In the dairy industry, the detection of pathogens is essential to ensuring the safety of products. These microorganisms can enter the production chain through contaminated raw materials, processing equipment, or improper storage, posing a risk to public health. Infections such as listeriosis, salmonellosis, and enterocolitis can be severe, especially in vulnerable populations, making the implementation of strict controls throughout the production chain essential.

Continuous and efficient monitoring ensures compliance with strict health regulations, strengthens consumer confidence and minimizes the economic impact of potential contaminations. Additionally, the identification of spoilage microorganisms helps extend the shelf-life products without compromising their quality and safety.

Deteriorating microorganisms play a key role in altering product quality, affecting its taste, texture, aroma, and shelf-life. Microorganisms can proliferate in dairy products, leading to the breakdown of fats and proteins, unwanted fermentations, and mold formation. Resulting in unpleasant flavors and odors, as well as a loss of freshness and food safety of the product.



KEY PATHOGENS

- Listeria monocytogenes
- Salmonella spp.
- Escherichia coli
- Staphylococcus aureus
- Bacillus cereus
- Cronobacter sakazakii



KEY INDICATORS

- Listeria spp.
- Enterobacteria



KEY SPOILAGE

- **Lactic acid bacteria group**
 - Bacillus spp. (including strains related to B. cereus)
 - Certain Clostridium species
- **Yeasts and Mold**
 - Candida spp.
 - Penicillium spp.
 - Aspergillus spp.
- **Psychrophillic Bacteria**
 - Certain bacteria, like Pseudomonas spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Ampliora 3.5 Salmonella spp., L. monocytogenes and Listeria spp. | 83 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Dairy - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|------------------------|--------------------|------------------------------|--|---|---|------------------------------|---|---|
| Pathogen testing | Salmonella spp. | Kit | Finished product | TAAG Sample bag; | Augmentis 14 Universal Gram Negative, p. 67 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 1.1 Salmonella spp. | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP11-25 Mono Salm spp 25g, p. 106 | | | | |
| | Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | Augmentis 41 Universal Pathogens | Nucleia 2 Tez-Q Plus, p. 74 | Specio 1.2 S. aureus | Kai - Melting curve analysis and Ai, p.18 | N/A |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP15 Mono Saur, p. 106 | | | | |
| | Listeria monocytogenes | Kit | Finished product | TAAG Sample bag | Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Specio 1.4 L. monocytogenes | Kai - Melting curve analysis and Ai, p.18 | N/A |
| | | | Surfaces | Collectio 1 NeutroSampling; | Augmentis 1 Listeria, p. 65 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP13 Mono Lmon, p. 106 | | | | |

Dairy - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|--|--|---|--|---|---|
| Pathogen testing | Listeria monocytogenes Listeria spp. | Kit | Finished product | TAAG Sample bag | Augmentis 1 Listeria, p. 64 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 2.3 Listeria spp. and L. monocytogenes, p. 80 | Mila - Multiplex qPCR, p.14 | Listeria serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling; | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">TAAG Sample bagCollectio 1 NeutroSampling | TAAG FSP22 Duplex Listeria spp-Listeria monocytogenes, p. 106 | | | | |
| | Listeria spp. Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 2.8 Listeria spp. and Salmonella spp., p. 81 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">Listeria serotyping and strain typing using NGS, p. 109; orSalmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 + Augmentis 1 Listeria, p. 65 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">TAAG Sample bagCollectio 1 NeutroSampling | TAAG FSP20 Duplex Salm-Listeria spp, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">TAAG Sample bagCollectio 1 NeutroSampling | TAAG FSP41 VIP, p. 106 | | | | |

Dairy - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|------------------------------|---|--|--|--|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | • Augmentis 11 Universal Bacteria, p. 65 ; or • Augmentis 51 Lactobacillus, p. 69 ; | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 ; | Nucleia 3 Clean-Q, p. 75 | Specio00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Egg Products

Egg-derived products are highly nutritious, making them an ideal environment for the growth of pathogenic microorganisms. These microorganisms pose a critical risk to public health as they can cause severe infections, particularly in vulnerable populations such as children, the elderly, and immunocompromised individuals.

The use of advanced technologies, such as PCR-based methods, enables the rapid detection of these contaminants, facilitating the implementation of preventive and corrective measures. This not only mitigates public health risks but also enhances consumer confidence in the food industry.

In the egg product industry, spoilage microorganisms can break down proteins and lipids, producing bad odors and flavors, and form biofilms that make it harder to remove. Mold affect the texture, flavor, and color of the product, and in some cases, produce harmful mycotoxins. Detecting these microorganisms is crucial to ensuring product quality and safety, preventing health risks and economic losses. To prevent their growth, it is essential to maintain proper storage conditions, such as refrigeration and humidity control, and to apply rigorous hygiene practices in facilities.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*
- *Staphylococcus aureus*



KEY SPOILAGE

- *Penicillium* spp.
- *Pseudomonas* spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--------------------------|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Egg Products - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|--|---|---|--|---|---|
| Pathogen testing | Escherichia coli Escherichia coli O157:H7 | Kit | Finished product | TAAG Sample bag | Augmentis 14 Universal Gram Negative, p. 67 | Nucleia 2 Tez-Q Plus, p. 74 | Specio 2.4 E. coli and E. coli O157:H7, p. 85 | Kai - Melting curve analysis and Ai, p.18 | |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP28 Duplex Ecoli, p. 106 | | | | |
| | Escherichia coli O157:H7 Escherichia coli STEC Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp., p. 83 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP37 Triplex SamI-Ecoli O157 and STEC, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis A31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag• Collectio 1 NeutroSampling | TAAG FSP41 VIP, p.84 | | | | |

Egg Products - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|-------------|---|---|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Surfaces | Collectio 1 NeutroSampling | <ul style="list-style-type: none">• Augmentis 11 Universal Bacteria, p. 66; or• Augmentis 51 Lactobacillus, p. 70; | Nucleia 3 Clean-Q, p. 76 | Specio 00.1 Bacteria, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | Lab service | Surfaces | <ul style="list-style-type: none">• TAAG Sponges; or• TAAG Swabs | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Surfaces | Collectio 1 NeutroSampling | Augmentis 21 Yeast & Mold, p. 68 ; | Nucleia 3 Clean-Q, p. 76 | Specio 00.2 Yeast & Mold, p. 96 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | Lab service | Surfaces | <ul style="list-style-type: none">• TAAG Sponges; or• TAAG Swabs | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Fresh & Processed Produce

In the fresh produce industry, especially leafy greens such as lettuce, spinach, arugula, and mixed salads, the early detection of pathogenic microorganisms is essential to ensure consumer health and maintain trust in fresh food supply chains. These products are often consumed raw, without any form of thermal processing, making contamination with foodborne pathogens particularly dangerous.

Some microorganisms can be introduced during cultivation, harvest, processing, packaging, or distribution, and they thrive in humid environments typical of leafy greens. Poor water quality, cross-contamination, and improper handling can further increase the risk of outbreaks.

Due to their short shelf life and vulnerability to spoilage, monitoring both hygiene indicators and spoilage organisms in fresh vegetables is equally important. The presence of spoilage microbes not only affects visual quality and texture, but also accelerates product decay and reduces commercial value.

Implementing robust and rapid detection methods is critical to minimize product recalls, avoid outbreaks, and maintain a strong brand image. The use of high-sensitivity PCR-based diagnostics allows for same-day results, enabling producers and processors to make timely and informed decisions to guarantee food safety and product quality.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*
- *Staphylococcus aureus*



KEY INDICATORS

- *Listeria* spp.



KEY SPOILAGE

- *Pseudomonas* spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|---|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Ampliora™ 2.8 <i>Listeria</i> spp. and <i>Salmonella</i> spp. | 82 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |

Fresh & Processed Products - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|---|--|--|--|---|--|
| Pathogen testing | Salmonella spp. Listeria spp. | Kit | Finished product | TAAG Sample bag; | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 2.8 Listeria spp. and Salmonella spp., p. 81 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 + Augmentis 1 Listeria, p. 65 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP20 Duplex Salm-Listeria spp, p. 106 | | | | |
| | Escherichia coli O157:H7 Escherichia coli STEC Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp., p. 83 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP37 Triplex Saml-Ecoli O157 and STEC, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP p. 86 | Kai - Melting curve analysis and Ai, p.18 | Listeria serotyping and strain typing using NGS, p. 109 ; or •Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP41 VIP, p. 106 | | | | |

Fresh & Processed Products - Products Combination

| | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------|--------------------|------------------------------|--|--|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | <ul style="list-style-type: none">• Augmentis 11 Universal Bacteria, p. 65; or• Augmentis 51 Lactobacillus, p. 69 | Nucleia 2 Tez-Q Plus p. 74 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |

Meat & Poultry

In the raw meat and poultry industry, accurate detection of pathogens is essential to ensure food safety and protect public health. These pathogens can be present in raw animal products and pose a significant risk if not properly controlled. Foodborne outbreaks associated with raw meat and poultry have had serious consequences. Early detection of pathogenic microorganisms in the meat industry is crucial for ensuring food safety and protecting public health.

Regular, precise testing detects even low-level contamination early, helping to prevent large-scale recall events, safeguard compliance with strict safety standards, and maintain the highest quality in dairy products.

Deteriorative microorganisms play a key role in the spoilage of meat and poultry by breaking down proteins and other components, causing changes in color, odor, and texture. Some thrive at low temperatures, such as those in refrigerated storage. Its presence, while not directly pathogenic, indicates spoilage, which can shorten product shelf life and increase the risk of contamination with harmful pathogens.

Since the product or food is neither sterile nor semi-sterile, the identification of spoilage microorganisms can be carried out through selective enrichment and isolated colonies on selective agars. Alternatively, a customized kit can be designed according to the specific needs of our client.



KEY PATHOGENS

- Listeria monocytogenes
- Salmonella spp.
- Escherichia coli
- Staphylococcus aureus



KEY INDICATORS

- Listeria spp.



KEY SPOILAGE

- Pseudomonas aeruginosa

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp. | 84 / 106 | 28 HRS |
| Ampliora 3.5 Salmonella spp., L. monocytogenes and Listeria spp. | 83 / 106 | 28 HRS |
| Ampliora 2.8 Listeria spp. and Salmonella spp. | 82 / 106 | 28 HRS |

Meat & Poultry - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|---|--|---|---|---|---|
| Pathogen testing | Escherichia coli Escherichia coli O157:H7 | Kit | Finished product | TAAG Sample bag | Augmentis 14 Universal Gram Negative, p. 67 | Nucleia 2 Tez-Q Plus, p. 74 | Specio 2.4 E. coli and E. coli O157:H7, p. 85 | Kai - Melting curve analysis and Ai, p.18 | |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP28 Duplex Ecoli, p. 106 | | | | |
| | Listeria spp. Salmonella spp. | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 2.8 Listeria spp. and Salmonella spp., p. 81 | Mila - Multiplex qPCR, p.14 | •Listeria serotyping and strain typing using NGS, p. 109 ; or •Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 + Augmentis 1 Listeria, p. 65 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP20 Duplex Salm-Listeria spp, p. 106 | | | | |
| | Listeria monocytogenes Listeria spp. Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 3.5 Salmonella spp., L. monocytogenes and Listeria spp., p. 82 | Mila - Multiplex qPCR, p.14 | •Listeria serotyping and strain typing using NGS, p. 109 ; or •Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | | | | |
| | | Lab service | Finished product or Surfaces | TAAG Sample bag Collectio 1 NeutroSampling | TAAG FSP32 Triplex Salm - L. monocytogenes - L. spp., p. 106 | | | | |

Meat & Poultry - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|---|--|---|--|---|---|
| Pathogen testing | Escherichia coli O157:H7 Escherichia coli STEC Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 70 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp., p. 83 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | TAAG Sample bag Collectio 1 NeutroSampling | TAAG FSP37 Triplex SamI-Ecoli O157 and STEC, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | TAAG Sample bag Collectio 1 NeutroSampling | TAAG FSP41 VIP, p. 106 | | | | |

Nutraceutical

The nutraceutical industry, which includes products such as dietary supplements, functional foods, and herbal products, has experienced significant growth in recent years due to the increasing demand from consumers seeking to improve their health and well-being. These products combine the benefits of food and medicine to offer additional health benefits, such as boosting immunity, improving digestion, or supporting heart health. Since they are consumed for preventive or health-improvement purposes, ensuring their safety and quality is essential.

Early detection of these pathogens is crucial to avoid health risks, protect consumers, and comply with strict regulatory standards, ensuring that nutraceutical products remain a reliable choice for consumers.

In the nutraceutical industry, the presence of spoilage microorganisms poses a significant challenge to product integrity. They can contaminate supplements with its heat-resistant spores, affect product stability and shelf life. Others can produce mycotoxins that compromise safety, or ferment sugar-rich products, altering their flavor and texture. Detecting and controlling these microorganisms is crucial to preserving the quality of nutraceuticals and meeting food safety standards.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*
- *Staphylococcus aureus*



KEY SPOILAGE

- *Bacillus* spp.
- *Pseudomonas* spp.
- *Aspergillus* spp.
- *Zygosaccharomyces* spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--------------------------|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Nutraceutical - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|-------------------|--|--------------------|------------------------------|---|--|---|---|---|---|
| Pathogens testing | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 ; or | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP41 VIP, p. 106 | | | | |
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | • Augmentis 11 Universal Bacteria, p. 65 ; or • Augmentis 51 Lactobacillus, p. 69 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Pet Food & Animal Feed

In the pet food and animal feed industry, detecting pathogens is crucial for safeguarding animal health and well-being. Bacterium can proliferate even at refrigeration temperatures, making it a threat in improperly stored products. This infection can be particularly severe in animals with weakened immune systems, causing serious conditions such as sepsis and meningitis. They can be responsible for gastrointestinal infections that can affect digestion, cause diarrhea, dehydration, and other disorders in animals, compromising their health and performance. Additionally, the transmission of these pathogens through contaminated feed can lead to disease outbreaks in farms or pet facilities.

Early detection and control of these pathogens in animal feed production are essential to avoid these risks, ensure product safety, and protect animal health.

In the pet food and animal feed industry, detecting spoilage microorganisms is crucial to maintaining product quality. They can form resistant spores that cause spoilage and toxin production, affecting the taste, odor, and safety of the feed. Some thrive in humid environments, accelerating food decomposition and altering its palatability and nutritional value. Detecting and controlling these microorganisms is essential to preserving the quality and safety of animal feed.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*



KEY SPOILAGE

- *Bacillus* spp.
- *Pseudomonas* spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|----------------------|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |

Pet Food & Animal Feed - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|-------------------|---|--------------------|---------------------------------|--|--|---|---|---|--|
| Pathogens Testing | Escherichia coli O157:H7 Listeria monocytogenes Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 3.2 Salmonella spp, L.monocytogenes and E. coli O157:H7 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FSP46 Triplex Salmonella spp, L. monocytogenes and E. coli O157:H7, p. 106 | | | | |
| Spoilage Testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | <ul style="list-style-type: none">• Augmentis 11 Universal Bacteria, p. 65; or• Augmentis 51 Lactobacillus, p. 69 | Nucleia 2 Tez-Q Plus p. 74 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |

Pharmaceutical

In the pharmaceutical industry, detecting pathogens is crucial to ensure product safety. They can cause severe infections, especially in products intended for ingestion or for application to open wounds. Some pathogenic strains, can cause serious illnesses, organ damage, and even kidney failure, while others are known to produce heat-resistant enterotoxins that can cause infections, some of which are antibiotic-resistant, complicating treatment.

Early detection of these pathogens helps prevent contamination, ensuring that pharmaceutical products are safe for patients.

Deteriorating microorganisms are a significant concern in sensitive industries like pharmaceuticals and food, as they can compromise product quality and safety. Some thrive in moist environments and can affect the stability of pharmaceutical and cosmetic products, with some species being pathogenic. Others are antibiotic-resistant and can contaminate sterile products, causing serious infections. There are also some that by forming heat-resistant spores, can survive sterilization, proliferate, and produce toxins, or they can grow in sugary products and can cause fungal infections.



KEY PATHOGENS

- Salmonella spp.
- Escherichia coli
- Staphylococcus aureus



KEY SPOILAGE

- Pseudomonas spp.
- Burkholderia cepacian
- Bacillus spp.
- Candida spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--------------------------|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Pharmaceutical - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|-------------------|--|--------------------|------------------------------|---|--|---|---|---|--|
| Pathogens testing | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP SPID, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella and Listeria serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FSP41, p. 106 | | | | |
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | • Augmentis 11 Universal Bacteria, p. 65 ; or • Augmentis 51 Lactobacillus, p. 69 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Ready to Eat

Pathogens represent critical threats, particularly in the context of ready-to-eat foods. These microorganisms are associated with severe illnesses, ranging from gastrointestinal infections to life-threatening conditions such as septicemia, meningitis, and even death, especially among vulnerable populations. Furthermore, the resilience of these pathogens to adverse conditions, underscores their significance.

International regulatory standards require the implementation of stringent controls to ensure the absence of these pathogens in ready-to-eat foods. In this context, advanced diagnostic tools, such as PCR kits, play a fundamental role by enabling early and reliable identification, facilitating the timely implementation of corrective actions.

Some bacteria are widely distributed in moist environments, thriving under refrigeration conditions, which makes them particularly problematic in perishable foods. They are responsible for changes in the flavor, odor, and texture of food products. Similarly, Mold and yeasts contribute to spoilage through affecting the color, aroma, and stability of products. Timely and accurate detection of these spoilage microorganisms is essential to ensure the quality and safety of ready-to-eat foods. Molecular and microbiological methods, enable rapid identification of these contaminants, helping to minimize economic losses while ensuring high-quality, visually and sensorially acceptable products. Since the product is neither sterile nor semi-sterile, the identification of spoilage microorganisms can be carried out through selective enrichment and isolated colonies on selective agars. Alternatively, a customized kit can be designed according to the specific needs of our client.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*
- *Staphylococcus aureus*



KEY INDICATORS

- *Listeria* spp.



KEY SPOILAGE

- *Pseudomonas aeruginosa*
- Yeast & Mold

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Ampliora™ F39 <i>E. coli</i> STEC, <i>E. coli</i> O157:H7 and <i>Salmonella</i> spp. | 84 / 106 | 28 HRS |
| Ampliora 2.8 <i>Listeria</i> spp. and <i>Salmonella</i> spp. | 82 / 106 | 28 HRS |

Ready to Eat - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|------------------------------|--|--|---|--|---|---|
| Pathogen testing | Escherichia coli Escherichia coli O157:H7 | Kit | Finished product | TAAG Sample bag | Augmentis 14 Universal Gram Negative, p. 66 | Nucleia 2 Tez-Q Plus, p. 74 | Specio 2.4 E. coli and E. coli O157:H7, p. 85 | Mila - Multiplex qPCR, p.14 | |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FSP28 Duplex Ecoli, p. 106 | | | | |
| | Listeria spp. Salmonella spp. | Kit | Finished product | TAAG Sample bag | <ul style="list-style-type: none">• Augmentis 14 Universal Gram Negative, p. 67;+ Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 2.8 Listeria spp. and Salmonella spp., p. 81 | Mila - Multiplex qPCR, p.14 | <ul style="list-style-type: none">•Listeria serotyping and strain typing using NGS, p. 109; or•Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FSP20 Duplex Salm-Listeria spp, p. 106 | | | | |
| | Escherichia coli O157:H7 Escherichia coli STEC Salmonella spp. | Kit | Finished product | TAAG Sample bag | Augmentis 91 BPW, p. 71 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp., p. 83 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FSP37 Triplex SamI-Ecoli O157 and STEC, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | <ul style="list-style-type: none">• Augmentis 91 BPW, p. 71;+ Augmentis 1 Listeria, p. 65; or | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis A31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FSP41 VIP, p. 106 | | | | |

Ready to Eat - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|------------------------------|--|---|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | Augmentis 11 Universal Bacteria, p. 65 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Sauces & Condiments

In the sauces and condiments industry, the detection of key pathogens is crucial for ensuring food safety and protecting public health. Some are particularly dangerous due to their ability to grow at low temperatures, making them a threat in refrigerated products like dairy-based or vegetable-based sauces. Others are commonly associated with gastrointestinal infections, can contaminate ingredients such as herbs, spices, or animal-derived products, compromising the safety of sauces and dressings. They also pose a significant health risk as they may be present in raw ingredients like fresh vegetables or improperly processed meat.

Early detection of these pathogens is essential to prevent foodborne illness outbreaks, comply with regulatory standards, and maintain consumer trust in products, minimizing health risks and economic losses.

In the sauces and condiments industry, spoilage microorganisms can affect product quality, they can produce toxins that alter flavor and cause foodborne illnesses, they can ferment sugars, affecting the texture and taste of sauces, they can produce harmful mycotoxins, like aflatoxins, and can cause visible mold, compromising safety, and some, while beneficial in controlled fermentation, can cause unwanted fermentation, altering acidity and flavor. Controlling these microorganisms is essential to ensure safe, high-quality products.



KEY PATHOGENS

- Listeria monocytogenes
- Salmonella spp.
- Escherichia coli



KEY SPOILAGE

- Lactobacillus spp.
- Aspergillus spp.
- Penicillium spp.
- Bacillus spp.

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--------------------------|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Sauces & Condiments - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|-------------------|--|--------------------|---------------------------------|--|---|--|---|--|--|
| Pathogens testing | Escherichia coli O157:H7 Listeria monocytogenes Salmonella spp. | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 | Nucleia 2 Tez-Q Plus, p. 74 | Ampliora 3.2 Salmonella spp, L.monocytogenes and E. coli O157:H7 | Mila - Multiplex qPCR, p.14 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag; • TAAG Sponges; or • TAAG Swabs | TAAG FSP46 Triplex Salmonella spp, L. monocytogenes and E. coli O157:H7, p. 106 | | | | |
| | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Finished product | TAAG Sample bag | • Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 ; | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag; • TAAG Sponges; or • TAAG Swabs | TAAG FSP41 VIP, p. 106 | | | | |

Sauces & Condiments - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|------------------------------|--|--|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | <ul style="list-style-type: none">• Augmentis 11 Universal Bacteria, p. 65; or• Augmentis 51 Lactobacillus, p. 69 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | <ul style="list-style-type: none">• TAAG Sample bag;• TAAG Sponges; or• TAAG Swabs | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Seafood

The identification of pathogens is crucial in the seafood industry to ensure food safety and prevent outbreaks. Seafood can become contaminated at various stages, from harvesting in polluted waters to processing, storage, and distribution. Factors such as fecal contamination, improper handling, inadequate refrigeration, and cross-contamination can facilitate the proliferation of these pathogens. There are key microorganisms in seafood spoilage, affecting its quality, safety, and shelf life. There are bacterium that thrive in refrigerated conditions and generate unpleasant odors and changes in seafood texture. Other marine bacteria can proliferate in raw seafood, especially in warm, high-salinity environments. They pose a risk to human health, and contribute to product deterioration by affecting its freshness and sensory quality.

Early detection through techniques like PCR and microbiological cultures allows contamination to be identified before products reach consumers, reducing the risk of foodborne illnesses. Additionally, strict monitoring helps businesses comply with health regulations, avoid costly recalls, and maintain consumer trust in the quality and safety of seafood. Since the product is neither sterile nor semi-sterile, the identification of spoilage microorganisms can be carried out through selective enrichment and isolated colonies on selective agars. Alternatively, a customized kit can be designed according to the specific needs of our client.



KEY PATHOGENS

- *Listeria monocytogenes*
- *Salmonella* spp.
- *Escherichia coli*
- *Staphylococcus aureus*
- *V. cholerae*
- *V.vulnificus*
- *V.parahaemolyticus*



KEY INDICATORS

- *Listeria* spp.



KEY SPOILAGE

- *Pseudomonas aeruginosa*

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--|--|--------------------|
| TAAG F41 VIP | 87 / 106 | 28 HRS |
| Ampliora 2.8 <i>Listeria</i> spp. and <i>Salmonella</i> spp. | 82 / 106 | 28 HRS |

Seafood - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|--|--------------------|---------------------------------|--|---|--|--|--|--|
| Pathogen testing | Escherichia coli Listeria monocytogenes Salmonella spp. Staphylococcus aureus | Kit | Seafood product | TAAG Sample bag | Augmentis 91 BPW, p. 71 ; + Augmentis 1 Listeria, p. 65 ; or | Nucleia 2 Tez-Q Plus, p. 74 | TAAG F41 VIP, p. 86 | Kai - Melting curve analysis and Ai, p.18 | Salmonella serotyping and strain typing using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | Augmentis 31 Universal Surfaces, p. 69 | | | | |
| | | Lab service | Finished product or Surfaces | TAAG Sample bag Collectio 1 NeutroSampling | TAAG FSP41 VIP, p. 106 | | | | |
| | Vibrio cholerae Vibrio parahaemolyticus Vibrio vulnificus | Kit | Shrimp | TAAG Sample bag | Alkaline Peptone Water (APW), | Nucleia 2 Tez-Q Plus p. 75 | Ampliora 3.10 V.cholerae, V.vulnificus and V.parahaemolyticus | Mila - Multiplex qPCR, p.14 | |
| | | Lab service | Shrimp | TAAG Sample bag | • TAAG FSP110 Mono Vibrio cholerae (P/A), p. 106 ; • TAAG FSP112 Mono Vibrio vulnificus (P/A), p. 106 ; and • TAAG FSP113 Mono Vibrio parahaemolyticus (P/A), p.107 | | | | |
| | | | | | | | | | |

Sterile Products

In the sterile product industry, both bacteria and fungi/yeasts can be significant spoilage microorganisms. Some are particularly concerning due to its ability to form resistant spores that survive sterilization processes and, when reactivated, can cause spoilage and produce toxins. Others thrive in humid environments and can affect the stability and safety of sterile products by producing pigments, odors, and harmful compounds. These microorganisms can proliferate in humid conditions or in products with high sugar content, altering the taste, texture, and integrity of the product. Some fungi can produce mycotoxins, which are harmful to health, and certain yeasts can grow even in low-oxygen environments. Early detection and effective control of these spoilage microorganisms are essential to ensure the quality, safety, and efficacy of sterile products, especially in the pharmaceutical, medical, and food industries, where purity and sterility standards are critical.



KEY SPOILAGE

- Bacillus spp.
- Pseudomonas spp.
- Yeast & Mold

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|--------------------------|--|--------------------|
| Specio 00.1 Bacteria | 95 / 106 | 28 HRS |
| Specio 00.2 Yeast & Mold | 96 / 106 | 52 HRS |

Sterile Products - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|------------------|-----------------------------|--------------------|------------------------------|---|---|--|---|---|---|
| Spoilage testing | All spoilage bacteria | Kit | Finished product | TAAG Sample bag | Augmentis 11 Universal Bacteria, p. 65 | Nucleia 3 Clean-Q, p. 75 | Specio 00.1 Bacteria, p. 94 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Finished product | TAAG Sample bag | Augmentis 21 Yeast & Mold, p. 67 | Nucleia 3 Clean-Q, p. 75 | Specio 00.2 Yeast & Mold, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | | Surfaces | Collectio 1 NeutroSampling | | | | | |
| | | Lab service | Finished product or Surfaces | • TAAG Sample bag • Collectio 1 NeutroSampling | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |

Water

In the water industry, detecting total coliforms and Escherichia coli is crucial to ensure the safety of drinking water. Total coliforms are bacteria commonly found in the environment, and their presence indicates potential fecal contamination of the water, which may be linked to more harmful pathogens. Escherichia coli, in particular, is a specific marker of recent fecal contamination and can cause serious health issues, such as diarrhea and other gastrointestinal infections. Timely detection of these microorganisms allows for preventive and corrective measures to ensure the water is safe for human consumption and meets public health regulations.



KEY INDICATORS

- Total coliforms
- Escherichia coli

Ideal TAAG kits and laboratory services

| KITS & LAB SERVICES | PAGE (kit/Service) | TIME TO RESULTS |
|-----------------------------|--|--------------------|
| Ampliora 6.1 WaterScan Plus | 97 / 106 | 28 HRS |

Water - Products Combination

| Application | Target microorganisms | Kit or Lab Service | Sample Type | Sample collection | Enrichment | DNA extraction | PCR | PCR Technology | Complementary Lab testing |
|-------------------|---|--------------------|-------------|------------------------------------|--|---|--|---|--|
| Indicator testing | Citrobacter spp. Enterobacter spp. Enterococcus spp. Escherichia coli Escherichia spp. Klebsiella spp. | Kit | Water | Membrane filter, 0.45 µm cellulose | • BHI broth; or • TSYE broth | Nucleia 2 Tez-Q Plus, p. 75 | Ampliora 6.1 WaterScan Plus, p. 97 | Mila - Multiplex qPCR, p.14 | • Citrobacter strain typing using NGS, p. 109 • Enterobacter strain typing using NGS, p. 109 • Enterococcus strain typing using NGS, p. 109 • Escherichia strain typing using NGS, p. 109 • Klebsiella strain typing using NGS, p. 109 |
| | | Lab service | Water | Membrane filter, 0.45 µm cellulose | TAAG FSM90W Water Screening, p. 106 | | | | |
| | Citrobacter spp. Escherichia coli Klebsiella spp. | Kit | Water | Membrane filter, 0.45 µm cellulose | • BHI broth; or • TSYE broth | Nucleia 2 Tez-Q Plus, p. 75 | Ampliora™ 3.11 WaterScan, p. 98 | Mila - Multiplex qPCR, p.14 | • Citrobacter strain typing using NGS, p. 109 • Klebsiella strain typing using NGS, p. 109 |
| | Enterobacter spp. Enterococcus spp. Escherichia spp. | Kit | Water | Membrane filter, 0.45 µm cellulose | • BHI broth; or • TSYE broth | Nucleia 2 Tez-Q Plus, p. 75 | Ampliora™ 3.12 WaterScan, p. 99 | Mila - Multiplex qPCR, p.14 | • Enterobacter strain typing using NGS, p. 109 • Enterococcus strain typing using NGS, p. 109 • Escherichia strain typing using NGS, p. 109 |
| Spoilage testing | All spoilage bacteria | Kit | Water | Membrane filter, 0.45 µm cellulose | • Augmentis 11 Universal Bacteria, p. 66 ; or • Augmentis 51 Lactobacillus, p. 70 | Nucleia 3 Clean-Q, p. 76 | Specio 00.1 Bacteria, p. 95 | Kai - Melting curve analysis and Ai, p.18 | Bacteria identification using NGS, p. 109 |
| | | Lab service | Water | Membrane filter, 0.45 µm cellulose | TAAGP FS20 Spoilage Bacteria, p. 106 | | | | |
| | All spoilage yeast and mold | Kit | Water | Membrane filter, 0.45 µm cellulose | Augmentis 21 Yeast & Mold, p. 68 | Nucleia 3 Clean-Q, p. 76 | Specio 00.2 Yeast & Mold, p. 96 | Kai - Melting curve analysis and Ai, p.18 | Yeast and mold identification using NGS, p. 109 |
| | | Lab service | Water | Membrane filter, 0.45 µm cellulose | TAAG FS21 Spoilage Yeast & Mold, p. 106 | | | | |



TAAG

PRODUCT LINES

Ampliora™ Kit line

Most food companies are required to analyze multiple pathogens as part of their microbiological programs. Typically, each pathogen test involves enrichment and analysis for every pathogen being detected.

For example, if a company needs to test for three pathogens—Salmonella, Listeria, and E. coli—they must perform three separate enrichments, three independent DNA extractions, three individual analyses, and three separate data evaluations and result publications.

The problem: Running multiple tests in parallel is costly and inefficient, leading to low productivity.

Our Ampliora™ kit line addresses all these challenges. Utilizing Mila technology, it offers seamless multiplexing capabilities with the highest levels of sensitivity and specificity. With this kit, you can be confident in your results, saving time and resources while ensuring accuracy.

KEY BENEFITS

• Increased Productivity

Streamline your testing process with our kits, reducing the labor needed for pathogen detection.

• Cost Efficiency

Save on operational costs by using a single assay to detect multiple pathogens simultaneously, minimizing the need for multiple tests.

• Fast, accurate and more informative results

Detection and identification of multiple pathogens in just 26 hours.

• Complementary laboratory services

- Microbiological baseline of your facilities to identify critical points.
- NGS services for pathogen traceability.

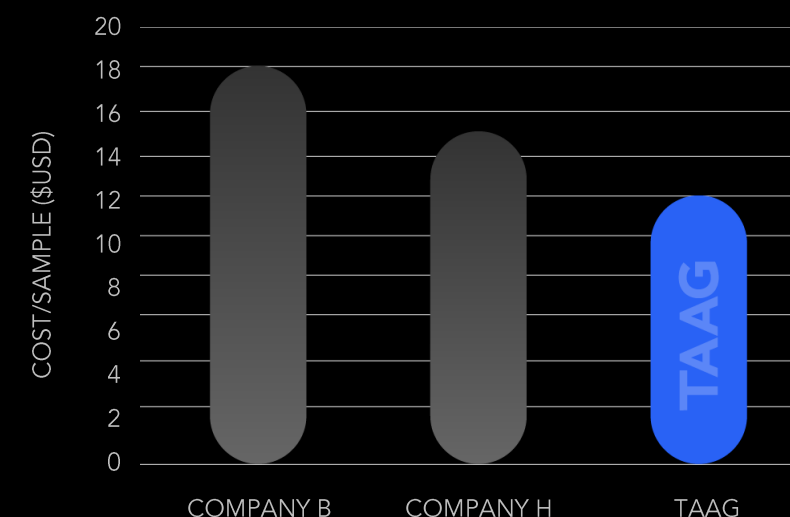
• Specific validation in your matrices

A kit certification on certain products doesn't guarantee it will work on yours. That's why we offer a free validation service on your specific products, ensuring that our kits deliver the most confident and accurate results possible in your unique matrices.

• Easy and fast customization

Do you need to identify more, less, or other pathogens? No problem, we can do this customization for you.

Price reagents for detecting 3 pathogens



Assuming an average reagent cost difference of \$4 per sample and a personnel cost of \$1.00 per reaction, processing 50 samples/day using Ampliora kits yields:

USD\$100,000 SAVINGS PER YEAR

Best multiplex PCR

Our Ampliora™ product line is the best PCR possible. Thanks to our ai technology, Mila, our kits development don't have to take compromises, while targeting exactly the microorganisms that you are looking for. They are designed with performance over simplicity.

Complementary laboratory testing: NGS and traceability

If any of the pathogens are detected in your sample, you can send it to one of our accredited laboratories for a complimentary Next-Generation Sequencing (NGS) analysis for traceability. See more details at [page 89](#).

All Ampliora™ kits are compatible with Ai software TxA. For more details at [page 100](#).

Elevia™ Kit line

Ultra-Sensitive and Rapid Pathogen Detection

Traditional pathogen testing often requires extended enrichment steps to achieve sufficient detection sensitivity, leading to long turnaround times and delayed decision-making. This inefficiency increases operational costs and slows down critical food safety and environmental monitoring workflows.

The Elevia™ kit line, powered by AiGOR™ technology, revolutionizes detection by utilizing highly transcribed RNA sequences as amplification targets. This unique approach enhances PCR sensitivity by up to 10,000-fold, enabling significantly faster and more accurate results. With reduced or even eliminated enrichment steps, Elevia™ kits provide laboratories with an efficient, high-throughput solution for pathogen detection.

KEY BENEFITS

- **Ultra-High Sensitivity**

Elevia™ Kits amplifies highly abundant RNA targets, enhancing detection by several orders of magnitude.

- **Enhanced Efficiency**

Minimizes hands-on time, increasing lab productivity and optimizing resource utilization.

- **No enrichment for environmental testing**

Reduce the lab outsourcing costs and the risk of cross contamination.

- **Quantitative Insights**

Supports precise quantification, enabling robust data interpretation for diverse applications.

- **Complementary laboratory services**

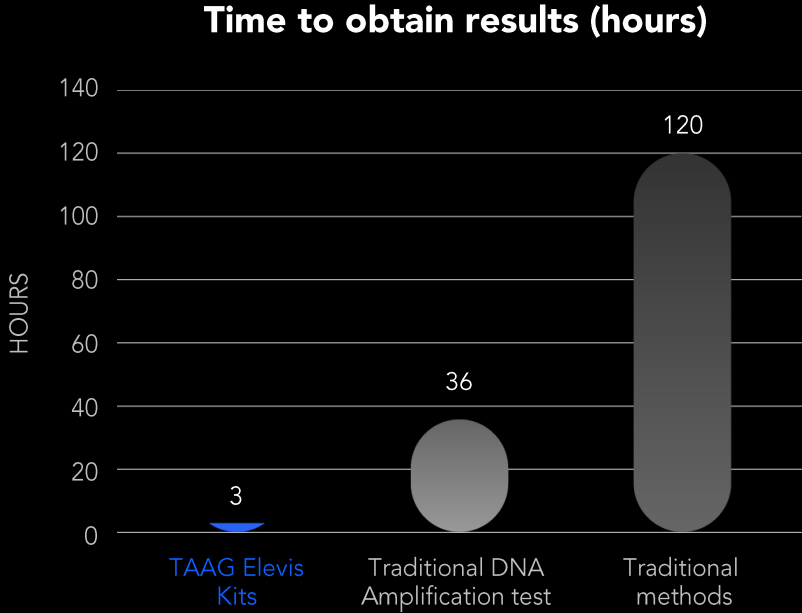
- Microbiological baseline of your facilities to identify critical points.
- NGS services for pathogen traceability.

- **Specific validation in your matrices**

A kit certification on certain products doesn't guarantee it will work on yours. That's why we offer a free validation service on your specific products, ensuring that our kits deliver the most confident and accurate results possible in your unique matrices.

- **Easy and fast customization**

Do you need to identify more, less, or other pathogens? No problem, we can do this customization for you.



Our technology allows for a 40-fold reduction in turnaround time, which means faster production lines for our clients. It also allows them to release their products more quickly, resulting in lower storage and warehousing costs.

10 to 40 times faster

Faster Turnaround

Thanks to our AI-based Aigor™ technology, we managed to create a product that reduces or eliminates enrichment, taking samples from the surfaces and delivering results in as little as three hours for environmental samples.

Complementary laboratory testing: NGS and traceability

If any of the pathogens are detected in your sample, you can send it to one of our accredited laboratories for a complimentary Next-Generation Sequencing (NGS) analysis for traceability. See more details at [page 89](#).

All AiGOR™ kits are compatible with Ai software TxA. For more details at [page 100](#).

Specio™ Kit line

Food safety testing often requires analyzing multiple pathogens separately, leading to extensive sample processing, multiple DNA extractions, and independent analyses. This traditional approach is time-consuming, costly, and inefficient, reducing overall laboratory productivity.

The Specio™ kit line, powered by KAi™ technology, transforms pathogen detection by enabling the identification of multiple microorganisms in a single PCR reaction. These kits utilize AI-driven melting curve analysis to differentiate pathogens with high precision, significantly improving throughput while maintaining exceptional sensitivity and specificity. By consolidating pathogen testing into a streamlined workflow, Specio™ kits help laboratories achieve greater efficiency, accuracy, and cost savings.

KEY BENEFITS

• Multiplex Detection

Detects multiple pathogens in one reaction, eliminating the need for separate tests.

• Cost and Time Efficiency

Minimizes labor, reagent use, and testing time while ensuring reliable results.

• Optimized Workflow

Reduces hands-on processing time and increases lab productivity.]

• AI-Enhanced Accuracy

KAi™ technology analyzes melting curves to distinguish organisms with high precision.

• Complementary laboratory services

- Microbiological baseline of your facilities to identify critical points.
- NGS services for pathogen traceability.

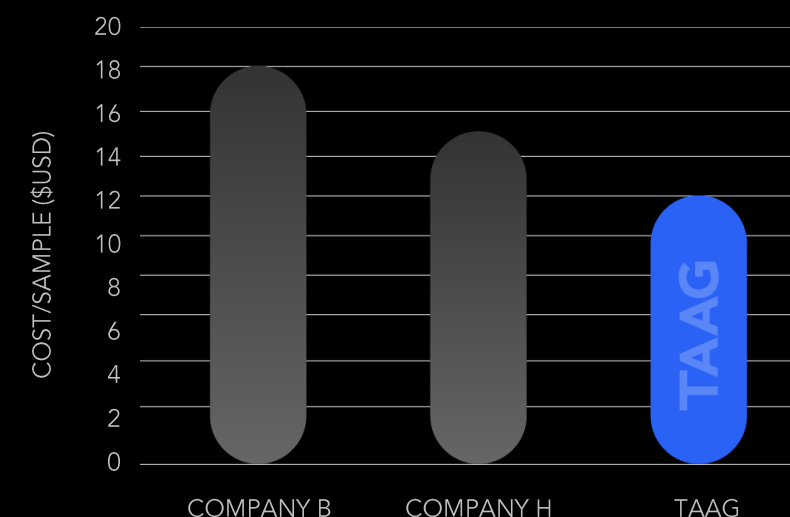
• Specific validation in your matrices

A kit certification on certain products doesn't guarantee it will work on yours. That's why we offer a free validation service on your specific products, ensuring that our kits deliver the most confident and accurate results possible in your unique matrices.

• Easy and fast customization

Do you need to identify more, less, or other pathogens? No problem, we can do this customization for you.

Price reagents for detecting 3 pathogens



Assuming an average reagent cost difference of \$4 per sample and a personnel cost of \$1.00 per reaction, processing 50 samples/day using Ampliora kits yields:

USD\$100,000 SAVINGS PER YEAR

Simplified Equipment Requirements

Specio™ kits are compatible with standard thermocyclers using a single detection channel (FAM), avoiding the need for more specialized instrumentation.

Complementary laboratory testing: NGS and traceability

If any of the pathogens are detected in your sample, you can send it to one of our accredited laboratories for a complimentary Next-Generation Sequencing (NGS) analysis for traceability. See more details at [page 89](#).

All Specio™ kits are compatible with Ai software TxA. For more details at [page 100](#).

Sample collection

Captus™ 1 Surfaces Direct



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|------------------|
| V-TB25 | 100 devices/case |

Product overview

Captus™ 1 Surface Direct is a specialized kit designed for the collection, storage, transport, and extraction of nucleic acids from surface samples, enabling their direct use in molecular biology workflows for the detection of microorganisms. After sampling, the swab is immersed in a microbial activation solution, allowing for immediate analysis by qPCR or RT-qPCR—without the need for an enrichment step. This solution simplifies surface monitoring workflows by reducing processing time and facilitating direct molecular detection, while remaining fully compatible with Magneus™ automated DNA extraction and Elevia™ qPCR/RT-qPCR kits.

Key features

- **Enrichment-Free Operation:** Eliminates the need for enrichment, streamlining pathogen detection.
- **Rapid Turnaround:** Delivers results in just 3 hours, compared to 24–28 hours with traditional qPCR.
- **Enhanced Safety:** Pre-opening heat treatment neutralizes live microorganisms, reducing biohazard risks.
- **Seamless Compatibility:** Optimized for use with Magneus™ and Eleven™ kits.
- **Simplified Workflow:** Combines collection, decontamination, and processing in a single device.

Applications

- **Food & Beverage Production**
Quickly verify presence of bacteria on equipment and surfaces.
- **Biotech & Pharmaceutical**
Maintain controlled production environments.

Related products

- Magneus™ kits ([page 78-80](#)): Automated DNA extraction kit enhancing efficiency and consistency in molecular testing workflows.
- Elevia™ kits ([page 85](#)): High-sensitivity detection solutions that work seamlessly with Captus™ surfaces direct

Time
3 min per sample

Enrichment

Augmentis™ 1 Listeria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|------------------------|
| V-FP26 | 1 jar - 500 g |
| V-FL25 | RUT 25 bottles – 40 mL |
| V-FL23 | RUT 50 tubes – 40 mL |

Product overview

Augmentis™ 1 Listeria is a dehydrated selective medium specifically formulated to promote the growth of *Listeria* spp. and *Listeria monocytogenes*, key pathogens in food safety. Ideal for food, beverages, surfaces, and environmental samples, this medium enhances the selective enrichment and detection of *Listeria* spp. and *Listeria monocytogenes*, ensuring reliable microbiological analysis. Augmentis™ 1 Listeria provides an optimal environment for bacterial proliferation, supporting efficient isolation and identification, and reinforcing quality control in food safety applications.

Key features

- **Tailored Enrichment:** Nutrient-rich culture medium optimized with multiple growth factors and nutritional components to maximize the development *Listeria* spp. and *Listeria monocytogenes*.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for DNA extraction.
- **Compatibility:** Fully compatible with all TAAG PCR kits designed for the detection of *Listeria* spp. and *Listeria monocytogenes*.
- **Dehydrated Formula:** The dehydrated formula offers an extended shelf life, simplifying storage and transportation, with quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a superior growth environment that optimally supports the proliferation of *Listeria* spp. and *Listeria monocytogenes*, significantly improving detection rates and reliability.

Applications

- Selective medium for the growth of *Listeria* spp. and *Listeria monocytogenes* in food, beverage, and surface samples.
- Ideal for food safety and environmental testing.
- Detects *Listeria* in production and processing environments..

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Augmentis™ 11 Universal Bacteria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-----------------------|
| V-FP02 | 1 jar - 500 g |
| V-FL11 | RTU 100 bottle – 9 mL |

Product overview

Augmentis™ 11 Universal Bacteria is an enriched medium available in dehydrated and ready-to-use formats, designed to support the growth of both Gram-positive and Gram-negative spoilage bacteria. Perfect for food, beverage, surface, handler, and environmental samples, it ensures optimal conditions for microbial growth, enabling quick detection and intervention to maintain product quality and safety. Ideal for use in microbiology labs and production facilities, it enhances the efficiency of spoilage detection and quality control processes.

Key features

- **Tailored Enrichment:** A nutrient-rich culture medium containing multiple growth factors and nutritional components optimized to maximize bacterial growth in samples from food, beverages, surfaces, and/or the environment.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for DNA extraction and bacterial detection using kits developed by TAAG TECHNOLOGIES.
- **Compatibility:** Fully compatible with all products from TAAG TECHNOLOGIES.
- **Dehydrated Formula:** Its dehydrated formula offers extended shelf life, simplifying storage and transportation, while ensuring quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a superior culture environment that promotes optimal bacterial growth, significantly improving detection rates and the reliability of results.

Applications

- Supports growth of both Gram-positive and Gram-negative spoilage bacteria.
- Detects spoilage microorganisms in food, beverages, and surfaces.
- Ensures timely detection for maintaining product quality and safety.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Augmentis™ 14 Universal Gram Negative



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|------------------------|
| V-FP27 | 1 jar - 500 g |
| V-FL16 | RUT 12 bottle – 225 mL |

Product overview

Augmentis™ 14 Universal Gram Negative is a nutrient-rich culture medium formulated with multiple growth factors and optimized nutritional content to maximize the growth of gram-negative microorganisms. After 24 ± 2 hours of incubation at 35 ± 2°C, samples are ready for detection using TAAG Technologies detection kits. The Augmentis™ 14 Universal Gram Negative culture medium is designed for use in food safety laboratories, production plants, and microbiological laboratories of varying complexity, providing reliable results for the detection of gram-negative microorganisms in diverse sample matrices.

Key features

- **Tailored Enrichment:** High-quality nutrient and supplement culture medium designed for the non-selective growth of gram-negative microorganisms in food, surface, and environmental samples.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for DNA extraction and pathogen detection using detection kits manufactured by TAAG Technologies.
- **Compatibility:** Compatible with a wide range of TAAG products, enhancing testing workflows for gram-negative pathogens
- **Dehydrated Formula:** The dehydrated formula ensures extended shelf life, simplifying storage and transportation, and allows for quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides an optimal culture environment for the growth of gram-negative microorganisms, significantly improving detection rates and the reliability of results.

Applications

- Buffered Peptone Water medium for pre-enrichment of *Salmonella* spp. and *Escherichia coli* in food and environmental samples.
- Enhances the growth of pathogens before further microbiological testing.
- Essential for ensuring optimal growth conditions for pathogen recovery in food safety testing.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Augmentis™ 21 Yeast & Mold



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-FP01 | 1 sachet - 21 g 50 bottles with beads |
| V-FP18 | RUT 50 bottles with beads– 9 mL |
| V-FL12 | RUT 100 bottles with beads– 9 mL |

Product overview

Augmentis™ 21 Yeast & Mold is an enriched broth available in dehydrated and ready-to-use formats, designed to support the growth of yeasts and Mold responsible for spoilage. Ideal for food, beverage, surface, handler, and environmental samples, it enables efficient detection and identification of spoilage microorganisms. With its optimal growth conditions, Augmentis™ 21 facilitates effective quality control, ensuring the safety and freshness of products by promoting rapid fungal growth for timely intervention.

Key features

- **Tailored Enrichment:** Nutrient-rich culture medium containing multiple growth factors and optimized nutritional inputs to maximize the development of deteriorating Mold and yeasts.
- **Rapid Detection:** After 48 ± 2 hours of incubation, samples are ready for DNA extraction and the detection of Mold and yeasts using the kits manufactured by TAAG Technologies.
- **Ideal Detection Kit:** Specio 00.2 Yeast & Mold.
- **Dehydrated Formula:** The dehydrated formula offers extended shelf life, simplifying storage and transportation, with fast and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a superior culture environment that promotes optimal growth of Mold and yeasts, significantly improving detection rates and the reliability of results.

Applications

- Promotes the growth of yeasts and Mold responsible for spoilage.
- Provides an optimal environment for the growth of fungi in food, beverages, and environmental samples.
- Facilitates the cultivation of spoilage microorganisms to ensure product quality.

Related products

- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.
- Nucleia™ 3 Clean-Q ([page 76](#)): Three-step extraction method for bacteria and fungi, capturing PCR inhibitors and ensuring efficient extraction for real-time PCR analysis.

Time
48 ± 2 Hours

Enrichment

Augmentis™ 31 Universal Surfaces



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|----------|-----------------------|
| V-FP08 | 1 jar - 500g |
| V-FE07-2 | RTU 50 bottles– 40 ml |
| V-FE07-4 | RTU 20 bottles– 90 ml |

Product overview

Augmentis™ 31 Universal Surfaces is a powerful enrichment medium available in dehydrated and ready-to-use formats, designed for the recovery of pathogens like *Salmonella* spp., *Staphylococcus aureus*, *Escherichia coli*, and *Listeria monocytogenes* from surface samples. It’s essential for ensuring food safety in environments with high sanitation standards. Ideal for food production areas, handling equipment, and packaging surfaces, it enhances pathogen detection and helps maintain rigorous hygiene and safety protocols in your operations.

Key features

- **Tailored Enrichment:** Dehydrated, nutrient-rich culture medium containing multiple factors that support the recovery of *Salmonella* spp., *Staphylococcus aureus*, *Escherichia coli*, and *Listeria monocytogenes* from surface samples.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for DNA extraction and pathogen detection from surfaces using the kits manufactured by TAAG Technologies.
- **Compatibility:** Compatible with all PCR kits designed to detect these microorganisms on surfaces.
- **Dehydrated Formula:** The dehydrated formula provides an extended shelf life, simplifying storage and transportation, and allows for quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a culture environment that promotes optimal bacterial growth, significantly improving detection rates and the reliability of results.

Applications

- Medium for the cultivation of pathogens like *Salmonella* spp., *Staphylococcus aureus*, *Escherichia coli*, and *Listeria monocytogenes* from surface samples.
- Enhances microbial recovery from surfaces in food production and packaging areas.
- Ideal for ensuring sanitation and detecting potential contamination risks in production environments.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Augmentis™ 51 Lactobacillus



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|----------|------------------------|
| V-FP13 | 1 jar - 500g |
| V-FL10 | RTU 25 bottles – 49 ml |
| V-FE10-3 | RTU 44 bottles – 49 ml |
| V-FE10-4 | RTU 100 tubes – 9 ml |

Product overview

Augmentis™ 51 Lactobacillus is a versatile growth medium ideal for detecting deteriorating lactic acid bacteria in food, beverages, sauces, and dressings. Available in dehydrated and ready-to-use formats, it ensures efficient and reliable cultivation of *lactobacillus* species, helping producers maintain superior product quality and prevent spoilage. A perfect solution for food and beverage producers seeking to safeguard their products from the impact of lactic acid bacteria.

Key features

- **Tailored Enrichment:** Dehydrated, nutrient-rich culture medium containing multiple growth factors and nutritional inputs optimized to maximize the development of deteriorating lactic acid bacteria.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for the detection of deteriorating lactic acid bacteria using the detection kits from TAAG Technologies.
- **Dehydrated Formula:** The dehydrated formula ensures an extended shelf life, simplifying storage and transportation, and allows for quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a culture environment that promotes the optimal growth of deteriorating lactic acid bacteria, significantly improving detection rates and the reliability of results.

Applications

- Supports the growth of lactobacillus species, which can cause spoilage in food, beverages, and sauces.
- Facilitates the cultivation of lactobacillus for quality control in food safety applications.
- Provides a reliable medium for assessing spoilage risk from lactobacillus bacteria.

Related products

- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Augmentis™ 91 BPW



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------------|
| V-FP25 | 1 jar - 500g |
| V-FL06 | RTU 25 bottles – 225 ml |
| V-FL31 | RTU 100 bottles – 9 ml |
| V-FL37 | RTU 100 tubes – 10ml |

Product overview

Augmentis 91 BPW is a dehydrated, ready-to-use Buffered Peptone Water medium designed to support the growth of *Salmonella* spp. and *Escherichia coli* in food and environmental samples. This high-quality medium is essential for pre-enrichment steps in microbiological testing, providing optimal conditions for the recovery of these pathogens before further analysis. Augmentis 91 BPW is ideal for food safety applications, ensuring reliable and efficient pathogen detection across various environments.

Key features

- **Tailored Enrichment:** High-quality nutrient and supplement culture medium for the non-selective growth of microorganisms in food, surface, and environmental samples.
- **Rapid Detection:** After 24 ± 2 hours of incubation, samples are ready for DNA extraction and pathogen detection using detection kits manufactured by TAAG Technologies.
- **Compatibility:** Compatible with a wide range of TAAG products.
- **Dehydrated Formula:** The dehydrated formula ensures extended shelf life, simplifying storage and transportation, and allows for quick and easy reconstitution in the laboratory.
- **Enhanced Sensitivity:** Provides a culture environment that promotes the optimal growth of microorganisms, significantly improving detection rates and the reliability of results.

Applications

- Buffered Peptone Water medium for pre-enrichment of *Salmonella* spp. and *Escherichia coli* in food and environmental samples.
- Enhances the growth of pathogens before further microbiological testing.
- Essential for ensuring optimal growth conditions for pathogen recovery in food safety testing.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
24 ± 2 Hours

Enrichment

Potentia™ 1 Salmonella spp.



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-----------------|
| V-PET01 | 1 bottle – 25 g |

Product overview

Potentia™ 1 Salmonella spp. is a growth activator that significantly increases *Salmonella* spp. recovery in Buffered Peptone Water, ensuring enhanced detection in cocoa matrices. Designed for microbiology and food safety labs, it is validated for 62% cocoa chocolate.

Key features

- **Enhanced Growth Activation:** Promotes *Salmonella* spp. proliferation in Buffered Peptone Water, improving recovery rates.
- **Optimized for Cocoa Matrices:** Validated for 62% cocoa chocolate, ensuring reliable performance in complex samples.
- **Improved Detection Sensitivity:** Increases the number of recoverable *Salmonella* spp., enhancing molecular detection accuracy.
- **Streamlined Workflow:** Easy integration into standard enrichment protocols without additional processing steps.

Applications

- **Confectionery Industry:** Optimizes *Salmonella* recovery for reliable results in chocolate and other cocoa-derived products.

Related products

- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.

Time
12 ± 2 Hours

Enrichment

Clarixa™ 1 Cocoa



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|------------------|
| V-PET02 | 1 bottle – 50 mL |

Product overview

Clarixa™ 1 Cocoa is a specialized pretreatment solution designed to optimize the extraction of DNA and RNA from *Salmonella* spp. in cocoa-based samples. Its advanced formulation neutralizes inhibitors present in chocolate matrices, enhancing nucleic acid solubility and stability. Additionally, it reduces sample viscosity and facilitates efficient cell lysis, ensuring a smoother and more reliable extraction process. Validated for 62% cocoa chocolate, Clarixa™ 1 Cocoa is ideal for food safety and microbiology laboratories requiring precise and high-quality molecular detection.

Key features

- **Pre-Extraction Optimization:** Prepares cocoa samples for DNA and RNA extraction by reducing inhibitors that may interfere with molecular analysis.
- **Enhanced Nucleic Acid Stability:** Improves solubility and preservation of DNA and RNA for more reliable detection.
- **Facilitates Cell Lysis:** Reduces sample viscosity, making cell lysis more efficient during nucleic acid extraction.

Applications

- **Confectionery Industry:** Enhances DNA/RNA extraction efficiency for reliable *Salmonella* detection in chocolate and other cocoa-derived products.

Related products

- Elevia™ kits ([page 85](#)): Highly sensitive PCR kits utilizing AiGOR technology for fast detection by amplifying abundant RNA, reducing enrichment steps.

Time
10 Min

Manual DNA extraction

Nucleia™ 1 Tez-Q



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------|
| V-EQ08 | 96 tubes – 250 µL |

Product overview

Nucleia™ 1 Tez-Q is a specialized extraction buffer that includes beads and an absorption resin designed to capture PCR inhibitors. The sample undergoes a 20-minute heating process at 95-99°C, ensuring efficient extraction of genetic material. This method is ideal for food safety laboratories analyzing enriched food samples, beverages, surfaces, and various environmental matrices. After extraction, the sample is ready for real-time PCR analysis.

Key features

- **Clean Extraction:** Contains an absorption resin specifically designed to capture PCR inhibitors, ensuring more accurate and reliable results.
- **Fast Processing:** Complete extraction in just 25 minutes, saving time and enhancing process efficiency.
- **Minimal Handling Time:** Ready-to-use kit: simply load the enriched sample, and in 25 minutes, nucleic acids will be prepared for PCR.
- **Seamless Integration:** Optimized for use with the Specio and Ampliora product lines, ensuring a comprehensive and efficient solution for detection.

Applications

- Extraction of genetic material from food, beverage, and environmental samples.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
~25 Min

Manual DNA extraction

Nucleia™ 2 Tez-Q Plus



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--------------------------------------|
| V-EQ19 | 96 tubes Tez-Q, 5 bottles – 10 ml |

Product overview

Nucleia™ 2 Tez-Q Plus s a user-friendly extraction kit that efficiently concentrates and extracts bacterial DNA in two simple steps. The genetic material is extracted by heating the sample for 20 minutes at 95-99°C. The kit contains an absorption resin that effectively captures PCR inhibitors, ensuring optimal performance during analysis. It is ideal for a wide range of matrices, including food, beverage, and environmental samples.

Key features

- **Clean Extraction:** Contains an absorption resin specifically designed to capture PCR inhibitors, ensuring more accurate and reliable results.
- **Fast Processing:** Complete extraction in just 25 minutes, saving time and enhancing process efficiency.
- **Minimal Handling Time:** Ready-to-use kit: simply load the enriched sample, and in 25 minutes, nucleic acids will be prepared for PCR.
- **Seamless Integration:** Optimized for use with the Specio™ and Ampliora™ product lines, ensuring a comprehensive and efficient solution for detection.

Applications

- Bacterial DNA extraction from food, beverage, and environmental samples.
- Ensures PCR inhibitor removal for accurate real-time PCR analysis.

Related products

- Ampliora™ Kits ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.
- Specio™ Kits ([page 86-87](#), [95-96](#)): AI-powered qPCR kits for detecting deteriorative microorganisms with increased throughput using Kai Technology’s melting curve analysis.

Time
~40 Min

Manual DNA extraction

Nucleia™ 3 Clean-Q



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-EQ18 | 96 tubes A, 96 tubes B, 5 bottles – 10 ml |

Product overview

Nucleia™ 3 Clean-Q is a simple three-step method designed for the efficient breakdown of macroscopic and microscopic structures of bacteria and fungi. The kit includes an absorption resin to capture PCR inhibitors and enhance the performance of molecular biology analyses. The genetic material is extracted by heating the sample for 20 minutes at 95-99°C. Afterward, the sample is ready for real-time PCR analysis, ideal for food, beverage, environmental, and surface samples.

Key features

- **Ultra-Clean Extraction:** Contains a saline buffer along with an adsorption resin designed to capture PCR inhibitors.
- **Fast Processing:** Complete extraction in just 40 minutes, saving time and enhancing process efficiency.
- **Minimal Handling Time:** Ready-to-use kit—simply load the enriched sample, and in 40 minutes, nucleic acids will be ready for PCR.
- **Seamless Integration:** Optimized for use with the Specio product line, ensuring a comprehensive and efficient detection solution

Applications

- Extraction of genetic material from bacteria and fungi in food, beverage, environmental, and surface samples.
- Ensures PCR inhibitor removal for accurate real-time PCR analysis.

Related products

- Specio™ 00.1 Bacteria ([page 95](#)): qPCR kit for detecting and identifying over 80 deteriorative bacteria in beverages, foods, and environmental samples. Powered by Kai Technology, it enables fast, reliable detection to support food safety.
- Specio™ 00.2 Yeast & Mold ([page 96](#)): qPCR kit for detecting and identifying over 50 deteriorative yeasts and Mold in beverages, foods, and environmental samples. Using Kai Technology, it ensures rapid, accurate detection to support food safety and quality

Time
~40 Min

Manual DNA extraction

Nucleia™ 4 Bacteria, Yeast and Mold



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--------------|
| V-EQ30 | 96 reactions |

Product overview

Nucleia™ 4 Bacteria, Yeast and Mold is designed for the efficient extraction of genetic material from yeast and bacteria in wine, beer, water, and surface samples. The extraction process involves mechanical disruption, cell lysis, and thermal methods, followed by a heating step at 95-99°C for 20 minutes. The kit provides high-quality samples ready for real-time PCR analysis.

Key features

- **Fast Processing:** Complete extraction in just 50 minutes, saving time and boosting efficiency.
- **Minimal Handling:** Ready-to-use kit—load the sample, follow simple steps, and nucleic acids are PCR-ready in 50 minutes.
- **Seamless Integration:** Optimized for use with the Ampliora product line for a complete detection solution.

Applications

- **Beer & Wine:** Extraction of yeast and bacterial DNA in beer, wine, and water samples.
- **Beverage industry:** Rapid and reliable testing for spoilage yeasts and bacteria across diverse beverage types.

Related products

- **Ampliora™ Kits** ([page 82-84](#), [88-94](#), [97-99](#)): Rapid, precise qPCR kits for detecting spoilage microorganisms, enhanced with Mila AI for high sensitivity and accuracy.

Time
~50 Min

Automated DNA extraction

Magneus™ 1 Bacteria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------------|
| V-EQ40 | 6 plates - 96 reactions |

Product overview

Magneus™ 1 Bacteria is a powerful DNA extraction solution optimized for use in automated extraction systems. It ensures high-efficiency, high-quality extraction with minimal inhibitor interference. Perfect for microbiology and food safety labs. Magneus 1 Bacteria enhances the reliability of PCR testing, providing accurate results with consistent performance. Its advanced magnetic bead technology streamlines the process, making it the ideal choice for high-throughput environments.

Key features

- **Ultra-Clean Extraction:** Uses magnetic beads to hybridize with genetic material under specific conditions provided by the binding solution. These beads are then captured by a magnetic field, allowing multiple washes before elution. This process reduces the presence of inhibitors in the sample, minimizing any adverse impact on real-time PCR detection.
- **Fast Processing:** Complete extraction in only 40 minutes.
- **Minimal Hands-On Time:** Ready-to-use kit—simply load the enriched sample, and within 40 minutes, nucleic acids are prepared for PCR, with less than one minute per sample of analyst intervention.
- **Automated Workflow:** Reduces manual labor and minimizes sample-to-sample variability.
- **Seamless Integration:** Optimized for use with the Ampliora™ product line, ensuring a comprehensive and efficient detection solution.

Applications

- Confectionery: Fast, precise microbial detection for a variety of confectionery products.
- Application in microbiology and food safety labs for the preparation of bacterial DNA from food, beverage, and environmental samples.
- Ideal for preparing samples for PCR analysis in high-throughput testing environments.
- Used to enhance efficiency in automated extraction workflows, ensuring accurate and reliable PCR results.

Related products

- Elevia™ Salmonella Kits ([page 85](#)): These high-sensitivity detection systems work in perfect synergy with Magneus Chocolate, enabling rapid and accurate Salmonella identification.
- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.

Time
~60 Min

Automated DNA extraction

Magneus™ 2 Bacteria, Yeast and Mold



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------------|
| V-EQ39 | 6 plates - 96 reactions |

Product overview

Magneus™ 2 Bacteria, Yeast & Mold is a high-efficiency DNA extraction solution tailored for automated workflows in microbial testing. Unlike standard kits, it is specifically designed to extract DNA from multiple microorganisms, including bacteria, yeasts, and Mold, ensuring broad-spectrum detection in a single workflow. Its optimized protocol guarantees minimal inhibitor interference, enhancing PCR accuracy. Whether in food safety, quality control, or clinical research, Magneus 2 Bacteria, Yeast & Mold delivers consistent, high-quality results in demanding, high-throughput environments.

Key features

- **Ultra-Clean Extraction:** Magnetic beads hybridize with bacterial, fungal, and yeast genetic material, enabling multiple washes to reduce inhibitors and enhance PCR accuracy.
- **Fast Processing:** Complete extraction in just 45 minutes.
- **Minimal Hands-On Time:** Ready-to-use kit—load the sample, and nucleic acids are PCR-ready in 45 minutes with less than 1 minute of analyst intervention.
- **Automated Workflow:** Reduces manual labor and sample-to-sample variability.
- **Seamless Integration:** Optimized for use with Ampliora™ and Elevia™ product lines for comprehensive detection of bacterial, fungal, and yeast contamination.

Applications

- Designed for extracting DNA from a wide range of microorganisms, including bacteria, yeasts, and Mold in food, beverage, and environmental samples.
- Applied for comprehensive microbial testing in industries like food safety, quality control, and clinical research.
- Supports efficient PCR sample preparation in automated systems, improving reliability and accuracy of microbial detection.

Related products

- Specio™ 00.1 Bacteria ([page 95](#)): qPCR kit for detecting and identifying over 80 deteriorative bacteria in beverages, foods, and environmental samples. Powered by Kai Technology, it enables fast, reliable detection to support food safety.
- Specio™ 00.2 Yeast & Mold ([page 96](#)): qPCR kit for detecting and identifying over 50 deteriorative yeasts and Mold in beverages, foods, and environmental samples. Using Kai Technology, it ensures rapid, accurate detection to support food safety and quality.

Time
~40 Min

Automated DNA extraction

Magneus™ 3 Bacteria, Yeast & Mold



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------------|
| V-MA01 | 6 plates - 96 reactions |

Product overview

Magneus™ 3 Bacteria, Yeast & Mold is an advanced DNA extraction solution optimized for automated extraction systems, specifically designed for detecting microorganisms in carbonated beverages, juices, and isotonic drinks. Its cutting-edge magnetic bead technology ensures highly efficient, high-quality DNA extraction while minimizing interference from inhibitors commonly found in these complex matrices. Ideal for microbiology and quality control laboratories in the beverage industry, Magneus™ 3 Bacteria, Yeast & Mold enhances the reliability of PCR testing by delivering precise and reproducible results. Its optimized workflow simplifies the process, making it the perfect solution for high-throughput environments in food safety and microbial quality control of beverages.

Key features

- **Ultra-Clean Extraction:** Magnetic beads hybridize with genetic material, enabling multiple washes to reduce inhibitors and enhance PCR accuracy.
- **Fast Processing:** Complete extraction in just 40 minutes.
- **Minimal Hands-On Time:** Ready-to-use kit—load the sample, and nucleic acids are PCR-ready in 40 minutes with minimal analyst intervention.
- **Automated Workflow:** Reduces manual labor and sample-to-sample variability.
- **Seamless Integration:** Optimized for use with the Ampliora product line for a comprehensive detection solution.

Applications

- Beverage industry: Rapid and reliable testing for spoilage yeasts and bacteria across diverse beverage types.

Related products

- Ampliora™ 4.7 Low-pH microorganisms ([page 94](#)): qPCR kit for rapid detection of spoilage microorganisms, and validated in beverages, ensuring product quality, flavor, and safety with high sensitivity, specificity, and minimized false positives.

Time
~60 Min

Pathogen qPCR kits (Mila technology)

Ampliora™ 2.3 Listeria spp. and L. monocytogenes



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF46 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 2.3 Listeria spp. and L. monocytogenes is an advanced qPCR detection kit designed for the rapid and highly sensitive identification of *Listeria monocytogenes* and *Listeria* spp. across food and environmental samples. Powered by Mila AI-Optimized Technology, the kit ensures unparalleled accuracy by selecting the optimal primer/probe sets, delivering superior sensitivity and specificity. Whether for routine monitoring or critical contamination control, Ampliora™ 2.3 Listeria spp. and L. monocytogenes provides a cutting-edge molecular solution for detecting *Listeria* with confidence.

Targets

- *Listeria monocytogenes*
- *Listeria* spp.

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Comprehensive pathogen detection for both food products and surfaces across manufacturing, processing, and packaging environments.
- Fast and reliable testing for *Listeria* spp. and *L. monocytogenes* in finished products, raw materials, and production areas.
- A dependable solution for effective contamination risk management in various industries.

Related products

- Augmentis™ 1 Listeria ([page 65](#)): Selective dehydrated medium for growing *Listeria* spp. in food, beverage, and surface samples, ensuring accurate detection and safe product quality control.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.

WORKFLOW

Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 1 Listeria, [p. 66](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus ,
[p. 76](#)
40 mins.

Real-time PCR

Ampliora™ 2.3 Listeria spp.
and L. monocytogenes
70 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

26 ± 2 hours

Pathogen qPCR kits (Mila technology)

Ampliora™ 2.8 Listeria spp. and Salmonella spp.



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF44 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 2.8 Listeria spp. and Salmonella spp. is an advanced qPCR kit designed for the simultaneous detection of *Listeria* spp. and *Salmonella* spp. in food and environmental samples. Powered by Mila AI-Optimized Technology, it ensures ultra-sensitive and highly specific pathogen identification, reducing false positives and enhancing accuracy. Ampliora™ 2.8 Listeria spp. and Salmonella spp. delivers fast, precise pathogen detection, optimizing food safety and quality assurance processes.

Targets

- *Listeria* spp.
- *Salmonella* spp.

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Pathogen screening for both food products and surfaces in manufacturing, processing, and packaging environments.
- Rapid detection of *Listeria* spp. and *Salmonella* spp. in finished products, raw materials, and production zones.
- A trusted solution for contamination prevention across multiple industries.

Related products

- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.

Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 91 BPW, [p. 72](#)
Augmentis™ 1 Listeria, [p. 66](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus ,
[p. 76](#)
40 mins.

Real-time PCR

Ampliora™ 2.8 Listeria spp.
and Salmonella
2.5 hours

Data analysis

TxA software, [p. 101](#)

Time to results

27 ± 2 hours

Pathogen qPCR kits (Mila technology)

Ampliora™ 3.5 Salmonella spp. L. monocytogenes and Listeria spp.



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF59 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 3.5 Salmonella spp., L. monocytogenes and Listeria spp. is an advanced qPCR kit designed for the simultaneous detection of *Salmonella* spp., *Listeria monocytogenes*, and *Listeria* spp. in food and environmental samples. Powered by Mila AI-Optimized Technology, it delivers exceptional sensitivity and specificity, ensuring rapid and precise pathogen identification while minimizing false positives. Ampliora F35 Salmonella spp., L. monocytogenes and Listeria spp. offers a fast, efficient solution for comprehensive pathogen monitoring, enhancing food safety and quality control.

Targets

- *Listeria monocytogenes*
- *Listeria* spp.
- *Salmonella* spp.

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Extensive pathogen detection for both food products and surfaces in manufacturing, processing, and packaging areas.
- Quick testing for *Salmonella* spp., *L. monocytogenes*, and *Listeria* spp. in finished products, raw ingredients, and production facilities.
- A proven solution for managing contamination risks in various sectors.

Related products

- Augmentis™ 1 Listeria ([page 65](#)): Selective dehydrated medium for growing *Listeria* spp. in food, beverage, and surface samples, ensuring accurate detection and safe product quality control.
- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 91 BPW, [p. 72](#)
Augmentis™ 1 Listeria, [p. 66](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus ,
[p. 76](#)
40 mins.

Real-time PCR

Ampliora™ 3.5 Salmonella
spp., L. monocytogenes and
Listeria spp.
120 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

26 ± 2 hours

Pathogen qPCR kits (Mila technology)

Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp.



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|----------|--|
| V-FF30-1 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp. is an advanced qPCR kit designed for the simultaneous detection of Shiga toxin-producing E. coli (STEC), E. coli O157:H7, and Salmonella spp. in leafy greens and meat. Powered by Mila AI-Optimized Technology, it ensures superior sensitivity and specificity, minimizing false positives and optimizing food safety testing. Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp. delivers rapid, reliable pathogen detection, enhancing quality control in fresh produce.

Targets

- *Escherichia coli* O157:H7
- *Escherichia coli* STEC
- *Salmonella* spp.

Key features

- **Certified by AOAC:** by extension of license number 032501.
- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Robust pathogen testing for both food products and surfaces in manufacturing, processing, and packaging areas.
- Efficient detection of *E. coli* STEC, *E. coli* O157:H7, and *Salmonella* spp. in finished products, raw materials, and production environments.
- A reliable tool for contamination control in diverse industries

Related products

- Augmentis™ 1 Listeria ([page 65](#)): Selective dehydrated medium for growing Listeria spp. in food, beverage, and surface samples, ensuring accurate detection and safe product quality control.
- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.

Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 91 BPW, [p. 72](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus , [p. 76](#)
40 mins.

Real-time PCR

Ampliora™ F39 E. coli STEC, E. coli O157:H7 and Salmonella spp.
100 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

26 ± 2 hours

Pathogen qPCR kits (AiGOR technology)

Elevia™ 1.1 Salmonella spp.



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF135 | SPID 12 PCR strips 100 µL - 96 reactions |
| V-SF120 | Tube format - 96 reactions |

Product overview

Elevia™ 1.1 Salmonella spp. is an advanced qPCR detection kit designed for ultra-sensitive, rapid detection of *Salmonella* spp. in chocolate and surfaces. Utilizing breakthrough AiGOR technology ([page 17](#)) —which boosts sensitivity by 10,000-fold over conventional qPCR—the kit achieves an impressive detection limit of 1 CFU/mL (in contrast to the typical 10,000 CFU/mL sensitivity of standard qPCR assays). This heightened sensitivity allows for only a short enrichment step, enabling the detection of *Salmonella* spp. in chocolate in just 9 hours (enrichment included), compared to the 24–28 hours required by traditional qPCR assays.

Targets

- *Salmonella* spp.

Key features

- **Unmatched Sensitivity:** AiGOR technology enhances detection to 1 CFU/mL, offering 10,000 times greater sensitivity than standard qPCR.
- **Rapid Turnaround:** Achieve complete *Salmonella* spp. detection in approximately 9 hours (including a minimal enrichment step).
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.
- **Seamless Integration:** Optimized for use with Magneus™, making it a comprehensive solution for detecting pathogens in challenging matrices like chocolate.

Applications

- Confectionary industry: quick results for chocolate related products.
- Reliable pathogen testing for both food products and surfaces in manufacturing, processing, and packaging environments.
- Quick and accurate testing for *Salmonella* spp. in finished products, raw materials, and production areas.
- A dependable solution for contamination risk mitigation across industries.

Related products

- Magneus™ 1 bacteria ([page 78](#)) : High-efficiency DNA extraction for bacteria in automated systems. Ensures minimal inhibitor interference, reliable PCR results, and streamlined workflows for microbiology and food safety labs.
- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.
- Captus 1 Surface Dircect ([page 65](#)): specialized kit designed for the collection, storage, transport, and extraction of nucleic acids from surface samples



Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 91 BPW, [p. 72](#)
From 6 hours

DNA extraction

Magneus™ 1 Bacteria,
[p. 79](#)
40 mins.

Real-time PCR

Elevia™ 1.1 Salmonella spp.
110 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

From 8.5 hours

Pathogen qPCR kits (KAi technology)

Specio™ 2.4 E. coli and E. coli O157: H7



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF05 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Specio™ 2.4 E. coli and E. coli O157:H7 is a cutting-edge qPCR kit designed for the rapid and reliable detection of *E. coli* and *E. coli* O157:H7 in food products. These pathogens are critical for monitoring contamination risks and ensuring food safety. Leveraging Kai Technology, the kit utilizes a specialized PCR melting curve assay combined with AI-driven analysis to identify multiple pathogens in one test, significantly improving throughput and precision. Specio™ 2.4 E. coli and E. coli O157:H7 delivers accurate, timely pathogen detection, supporting food safety compliance and reducing health risks.

Targets

- *Escherichia coli*
- *Escherichia coli* O157:H7

Key features

- **High Multiplex Capacity:** Quickly detect multiple pathogens in one test, saving time and resources.
- **Enhanced Accuracy:** AI-based curve analysis helps minimize false results by recognizing subtle differences between organisms.
- **Streamlined Workflow:** Eliminates the need for multiple separate assays, reducing both processing time and overall costs.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Comprehensive pathogen detection for both food products and surfaces in manufacturing, processing, and packaging areas.
- Swift and dependable testing for E. coli and E. coli O157:H7 in finished products, raw materials, and production zones.
- A reliable tool for managing contamination risks across a variety of industries.

Related products

- Augmentis™ 14 Universal Gram Negative ([page 67](#)): Nutrient-rich culture medium formulated with multiple growth factors and optimized nutritional content to maximize the growth of gram-negative microorganisms.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis

Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 14 Universal Gram Negative, [p. 68](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus, [p. 76](#)
40 mins.

Real-time PCR

Specio™ 2.4 E. coli and E. coli O157: H7
2.5 hours

Data analysis

TxA software, [p. 101](#)

Time to results

27 ± 2 hours

Pathogen qPCR kits (KAi technology)

TAAG F41 VIP



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|-----------|--|
| V-FF0 2-1 | SPID 1 PCR plate 100 µL - 96 reactions |
| V-FF0 2-2 | SPID 12 PCR strips 100 µL - 96 reactions |
| V-FF01-1 | Tube format – 96 reactions |

Product overview

TAAG F41 VIP is a qPCR kit designed for the rapid and precise detection of *S. aureus*, *L. monocytogenes*, *Salmonella* spp., and *E. coli* in food samples. These pathogens are critical indicators of foodborne illness, making early detection essential for food safety. Powered by Kai Technology, it combines a PCR melting curve assay with AI-driven data analysis, enabling the identification of multiple microorganisms in a single reaction, enhancing throughput and efficiency. TAAG F41 VIP offers fast, reliable pathogen detection, ensuring food safety and compliance with health regulations.

Targets

- *Escherichia coli*
- *Salmonella* spp.
- *Listeria monocytogenes*
- *Staphylococcus aureus*

Key features

- **Certified by AOAC:** by extension of license number 072101.
- **High Multiplex Capacity:** Quickly detect multiple pathogens in one test, saving time and resources.
- **Enhanced Accuracy:** AI-based curve analysis helps minimize false results by recognizing subtle differences between organisms.
- **Streamlined Workflow:** Eliminates the need for multiple separate assays, reducing both processing time and overall costs.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Complete pathogen detection for both food products and surfaces in manufacturing, processing, and packaging environments.
- Rapid identification of *S. aureus*, *L. monocytogenes*, *Salmonella* spp., and *E. coli* in finished products, raw materials, and production areas.
- A trusted solution for effective contamination risk management in multiple industries.

Related products

- Augmentis™ 1 Listeria ([page 65](#)): Selective dehydrated medium for growing *Listeria* spp. in food, beverage, and surface samples, ensuring accurate detection and safe product quality control.
- Augmentis™ 91 BPW ([page 71](#)): Medium for pre-enrichment of *Salmonella* and *E. coli* in food and environmental samples, enhancing pathogen detection efficiency, available in ready-to-use format.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 1 Listeria, [p. 66](#)
and Augmentis™ 91 BPW,
[p. 72](#)
24 ± 2 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus,
[p. 76](#)
40 mins.

Real-time PCR
TAAG F41 VIP
2.5 hours

Data analysis

TxA software, [p. 101](#)

Time to results

27 ± 2 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 8.1 Yeast Plus



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF64 | SPID 24 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 8.1 Yeast Plus is an advanced qPCR kit designed for the rapid and precise detection of spoilage yeasts in beer. It targets *Brettanomyces*, *Pichia*, *Saccharomyces*, and *Zygosaccharomyces* species, including *S. cerevisiae* var. *diastaticus*, a major contaminant in beer. Mila AI-Optimized Technology enhances specificity and sensitivity, ensuring accurate identification and minimizing false positives. Ampliora™ 8.1 Yeast Plus SPI enables early detection of spoilage yeasts, safeguarding beer quality and consistency.

Targets

- *Brettanomyces bruxellensis*
- *Brettanomyces* spp.
- *Pichia* spp.
- *Saccharomyces cerevisiae*
- *Saccharomyces cerevisiae* var. *diastaticus*
- *Saccharomyces* spp.
- *Zygosaccharomyces bailii/parabailii*
- *Zygosaccharomyces* group (*Z. bailii/parabailii* and *Z. rouxii*)

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
Wort Media
From 48 hours

DNA extraction
Nucleia™ 4 bacteria yeast
and Mold, [p. 78](#)
50 mins.

Real-time PCR
Ampliora™ 8.1 Yeast Plus
103 mins.

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 4.3 Yeast



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF100 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 4.3 Yeast is an advanced qPCR kit designed for the rapid and precise detection of spoilage yeasts in beer. It targets *Saccharomyces*, and *Zygosaccharomyces* species. Mila AI-Optimized Technology enhances specificity and sensitivity, ensuring accurate identification and minimizing false positives. Ampliora™ 4.3 Yeast enables early detection of spoilage yeasts, safeguarding beer quality and consistency.

Targets

- *Saccharomyces cerevisiae*
- *Saccharomyces spp.*
- *Zygosaccharomyces bailii/parabailii*
- *Zygosaccharomyces group (Z. bailii/parabailii and Z. rouxii)*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.
- Wine industry: Rapid and precise detection of spoilage yeasts in wine, surfaces and water.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
Wort Media
From 48 hours

DNA extraction
Nucleia™ 4 Bacteria, Yeast
and Mold, [p. 78](#)
50 mins.

Real-time PCR
Ampliora™ 4.3 Yeast
[103 mins.](#)

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 4.4 Yeast



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF101 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 4.4 Beer Yeast is an advanced qPCR kit designed for the rapid and precise detection of spoilage yeasts in beer. It targets *Brettanomyces*, *Pichia*, and *S. cerevisiae* var. *diastaticus*, a major contaminant in beer. Mila AI-Optimized Technology enhances specificity and sensitivity, ensuring accurate identification and minimizing false positives. 4.4 Beer Yeast enables early detection of spoilage yeasts, safeguarding beer quality and consistency.

Targets

- *Brettanomyces bruxellensis*
- *Brettanomyces* spp.
- *Pichia* spp.
- *Saccharomyces cerevisiae* var. *diastaticus*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
Wort Media
From 48 hours

DNA extraction
Nucleia™ 4 Bacteria, Yeast
and Mold, [p. 78](#)
50 mins.

Real-time PCR
Ampliora™ 4.4 Yeast
[103 mins.](#)

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 8.2 Bacteria Plus



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF99 | SPID 24 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 8.2 Bacteria Plus is an advanced qPCR kit designed for the rapid and precise detection of spoilage bacteria in beer. It targets key species from Lactobacillus, Pediococcus, Megasphaera, and Pectinatus, which are known to impact beer quality. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and delivering accurate results. Ampliora™ 8.2 Bacteria Plus enables early detection of spoilage bacteria, safeguarding beer quality and stability.

Targets

- *Fructilactobacillus lindneri*
- *Lactobacillus backii*
- *Lactobacillus collinoides/paracollinoides*
- *Lactobacillus* group (*Furfurilactobacillus rossiae*, *Lacticaseibacillus casei*, *Lacticaseibacillus paracasei*, *Lactiplantibacillus plantarum*, *Lentilactobacillus buchneri* and *Lentilactobacillus parabuchneri*.)
- *Levilactobacillus brevis*
- *Megasphaera* spp.
- *Pediococcus* spp.
- *Pectinatus* spp.

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
MRS broth
From 48 hours.

DNA extraction
Nucleia™ 4 Bacteria, Yeast
and Mold, [p. 78](#)
50 mins.

Real-time PCR
[Ampliora™ 8.2 Bacteria Plus](#)
103 mins.

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 4.5 Bacteria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF102 | SPID 12 PCR strips 100 µL - 96 reactions |
| V-SF114 | Tube format - 96 reactions |

Product overview

Ampliora™ 4.5 Bacteria is an advanced qPCR kit designed for the rapid and precise detection of spoilage bacteria in beer. It targets key species from *Lactobacillus*, and *Pediococcus* which are known to impact beer quality. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and delivering accurate results. Ampliora™ 4.5 Bacteria enables early detection of spoilage bacteria, safeguarding beer quality and stability.

Targets

- *Levilactobacillus brevis*
- *Fructilactobacillus lindneri*
- *Lactobacillus* group (*Furfurilactobacillus rossiae*, *Lacticaseibacillus casei*, *Lacticaseibacillus paracasei*, *Lactiplantibacillus plantarum*, *Lentilactobacillus buchneri* and *Lentilactobacillus parabuchneri*.)
- *Pediococcus* spp.

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
MRS broth
From 48 hours.

DNA extraction
Nucleia™ 4 Bacteria, Yeast
and Mold, [p. 78](#)
50 mins.

Real-time PCR
Ampliora™ 4.5 Bacteria
[103 mins.](#)

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 4.6 Bacteria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|-------------------------------------|
| V-SF103 | 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 4.6 Bacteria is an advanced qPCR kit designed for the rapid and precise detection of spoilage bacteria in beer. It targets key species from *Lactobacillus*, *Megasphaera*, and *Pectinatus*, which are known to impact beer quality. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and delivering accurate results. Ampliora 4.6 Bacteria enables early detection of spoilage bacteria, safeguarding beer quality and stability.

Targets

- *Lactobacillus backii*
- *Lactobacillus collinoides/paracollinoides*
- *Megasphaera spp.*
- *Pectinatus spp.*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beer industry: Rapid and precise detection of spoilage yeasts in beer.

Related products

- Nucleia™ 4 Bacteria, Yeast and Mold ([page 77](#)): Extraction kit for yeast and bacteria in beer, wine, water, and surface samples, providing high-quality genetic material for PCR analysis.



Sample

Sample collection
TAAG Sample bags

Enrichment
MRS broth
From 48 hours.

DNA extraction
Nucleia™ 4 Bacteria, Yeast and Mold, [p. 78](#)
50 mins.

Real-time PCR
Ampliora™ 4.6 Bacteria
103 mins.

Data analysis
TxA software, [p. 101](#)

Time to results
From 51 hours

Spoilage qPCR kits (Mila technology)

Ampliora™ 4.7 Spoilage Low-pH Microorganisms



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF155 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 4.7 Spoilage Low-pH Microorganisms is an advanced qPCR kit designed for the rapid and precise detection of spoilage microorganisms in beverages, including acidophilic bacteria, preservative-resistant yeasts, and spoilage yeast & Mold. These microorganisms can significantly affect the quality, flavor, and safety of beverages, making their early detection crucial for maintaining product integrity. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and delivering accurate results. Ampliora™ 4.7 Spoilage Low-pH Microorganisms enables the efficient monitoring of spoilage microorganisms, ensuring high-quality beverages throughout the production process.

Targets

- Acidophilic bacteria
- Brettanomyces spp.
- PRY(preservative-resistant yeasts)
- Spoilage yeast & Mold

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Beverage industry: Rapid and reliable testing for spoilage yeasts and bacteria across diverse beverage types.

Related products

- Magneus™ 3 Bacteria, Yeast & Mold ([page 80](#)): Advanced, magnetic, and automated DNA extraction solution for detecting microorganisms in carbonated beverages, juices, and isotonic drinks. The high-efficiency workflow ensures precise, reproducible PCR results, making it ideal for beverage industry quality control.

WORKFLOW

Sample

Sample collection

Membrane filter, 0.45 µm cellulose

Enrichment

Potato Dextrose Broth
From 48 hours

DNA extraction

Magneus™ 3 Bacteria, Yeast & Mold, [p. 81](#)
40 mins.

Real-time PCR

Ampliora™ 4.7 Spoilage Low-pH Microorganisms
120 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

From 51 hours

Spoilage qPCR kits (KAi technology)

Specio™ 00.1 Bacteria



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF14 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Specio™ 00.1 Bacteria is an advanced qPCR kit designed for the detection and identification of over 80 deteriorative bacteria in beverages, juices, sauces, foods, and environmental samples post-sanitization. These bacteria can negatively affect product quality and safety, making their rapid detection crucial. Powered by Kai Technology combines a specialized PCR melting curve assay with AI-driven data analysis to accurately identify a wide range of bacterial species in a single test, enhancing throughput and efficiency. Specio™ 00.1 Bacteria ensures fast, reliable bacteria detection, supporting food safety and quality assurance.

Targets

- Over 80 spoilage bacteria

Key features

- **High Multiplex Capacity:** Quickly detect multiple pathogens in one test, saving time and resources.
- **Enhanced Accuracy:** AI-based curve analysis helps minimize false results by recognizing subtle differences between organisms.
- **Streamlined Workflow:** Eliminates the need for multiple separate assays, reducing both processing time and overall costs.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- All Industries: Rapid and reliable detection of over 80 deteriorative bacteria in samples with low or zero microorganism count and post-sanitization surfaces across various industries. Ensures optimal product quality and safety through highly sensitive microbial analysis, verifying the effectiveness of sanitation processes.

Related products

- Augmentis™ 11 Universal Bacteria ([page 66](#)): Dehydrated enrichment broth supporting Gram-positive and Gram-negative bacteria growth, ideal for spoilage detection in food, beverages, surfaces, and environmental samples.
- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.
- Nucleia™ 3 Clean-Q ([page 76](#)): Three-step extraction method for bacteria and fungi, capturing PCR inhibitors and ensuring efficient extraction for real-time PCR analysis.

WORKFLOW



Sample

Sample collection
TAAG Sample bags

Enrichment

Augmentis™ 11 Universal Bacteria, [p.67](#)
24 hours

DNA extraction

Nucleia™ 3 Clean-Q,
[p. 77](#)
40 mins.

Real-time PCR

Specio™ 00.1 Bacteria
2.5 hours

Data analysis

TxA software, [p. 101](#)

Time to results

27 hours

Spolage qPCR kits (KAi technology)

Specio™ 00.2 Yeast & Mold



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF15 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Specio™ 00.2 Yeast & Mold is an advanced qPCR kit designed for the detection and identification of over 50 deteriorative yeasts and Mold in beverages, juices, sauces, foods, and environmental samples post-sanitization. These microorganisms can impact product quality and safety, making their early detection essential for maintaining standards. Powered by Kai Technology, combines a PCR melting curve assay with AI-driven data analysis to accurately identify a wide range of yeasts and Mold in a single test, optimizing throughput and efficiency. Specio™ 00.2 Yeast & Mold ensures rapid, reliable detection, supporting food safety and quality control.

Targets

- Over 50 spoilage yeast & Mold

Key features

- **High Multiplex Capacity:** Quickly detect multiple pathogens in one test, saving time and resources.
- **Enhanced Accuracy:** AI-based curve analysis helps minimize false results by recognizing subtle differences between organisms.
- **Streamlined Workflow:** Eliminates the need for multiple separate assays, reducing both processing time and overall costs.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- All Industries: Rapid and reliable detection of over 80 deteriorative bacteria in samples with low or zero microorganism count and post-sanitization surfaces across various industries. Ensures optimal product quality and safety through highly sensitive microbial analysis, verifying the effectiveness of sanitation processes.

Related products

- Augmentis™ 21 Yeast & Mold ([page 68](#)): Enrichment broth promoting yeast and mold growth, ideal for spoilage microorganism detection in food, beverages, surfaces, and environmental samples.
- Nucleia™ 3 Clean-Q ([page 76](#)): Three-step extraction method for bacteria and fungi, capturing PCR inhibitors and ensuring efficient extraction for real-time PCR analysis.

WORKFLOW



Sample

Sample collection
TAAG Sample bags

Enrichment
Augmentis™ 21 Yeast & Mold. [p. 69](#)
48 hours

DNA extraction
Nucleia™ 3 Clean-Q, [p. 77](#)
40 mins.

Real-time PCR
Specio™ 00.2 yeast & Mold
2.5 hours

Data analysis
TxA software, [p. 101](#)

Time to results
51 hours

Indicator qPCR kits (Mila technology)

Ampliora™ 6.1 WaterScan Plus



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF88 | SPID 24 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 6.1 WaterScan Plus is an advanced qPCR kit designed for the rapid and precise detection of waterborne indicator microorganisms. These indicators are crucial for assessing water quality and ensuring safety, making their early detection essential for regulatory compliance and health risk management. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and providing reliable results. Ampliora™ 6.1 WaterScan Plus enables early and accurate monitoring of waterborne indicators, safeguarding water quality and public health.

Targets

- *Citrobacter spp.*
- *Enterobacter spp.*
- *Enterococcus spp.*
- *Escherichia coli*
- *Escherichia spp.*
- *Klebsiella spp.*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Water testing: Rapid and highly accurate monitoring of water quality.

Related products

- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.

Sample

Sample collection

Membrane filter, 0.45 µm cellulose

Enrichment

BHI broth
8 hours

DNA extraction

Nucleia™ 2 Tez-Q Plus, [p. 76](#)
40 mins.

Real-time PCR

Ampliora™ 6.1 WaterScan Plus
120 mins.

Data analysis

TxA software, [p. 101](#)

Time to results

11 hours

Indicator qPCR kits (Mila technology)

Ampliora™ 3.11 WaterScan



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF98 | SPID 12 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 3.11 WaterScan is an advanced qPCR kit designed for the rapid and precise detection of waterborne indicator microorganisms. These indicators are crucial for assessing water quality and ensuring safety, making their early detection essential for regulatory compliance and health risk management. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and providing reliable results. Ampliora™ 3.11 WaterScan enables early and accurate monitoring of waterborne indicators, safeguarding water quality and public health.

Targets

- *Citrobacter spp.*
- *Escherichia coli*
- *Klebsiella spp.*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Water testing: Rapid and highly accurate monitoring of water quality.

Related products

- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.



Sample

Sample collection
Membrane filter, 0.45 µm
cellulose

Enrichment
BHI broth
8 hours

DNA extraction
Nucleia™ 2 Tez-Q Plus, [p. 76](#)
40 mins.

Real-time PCR
[Ampliora™ 3.11 WaterScan](#),
[120 mins.](#)

Data analysis
TxA software, [p. 101](#)

Time to results
11 hours

Indicator qPCR kits (Mila technology)

Ampliora™ 3.12 WaterScan



Download technical data sheet

ORDERING INFO

| Catalog | Format |
|---------|--|
| V-SF89 | SPID 24 PCR strips 100 µL - 96 reactions |

Product overview

Ampliora™ 3.12 WaterScan is an advanced qPCR kit designed for the rapid and precise detection of waterborne indicator microorganisms. These indicators are crucial for assessing water quality and ensuring safety, making their early detection essential for regulatory compliance and health risk management. Powered by Mila AI-Optimized Technology, it ensures high sensitivity and specificity, minimizing false positives and providing reliable results. Ampliora™ 3.12 WaterScan enables early and accurate monitoring of waterborne indicators, safeguarding water quality and public health.

Targets

- *Enterobacter spp.*
- *Enterococcus spp.*
- *Escherichia spp.*

Key features

- **AI-Optimized Performance:** Mila enhances PCR precision by selecting ideal primer/probe sets, ensuring unmatched sensitivity and specificity.
- **Ready-to-Use Format:** Designed for ease of use with minimal analyst intervention—streamlined for efficiency.
- **Internal Control:** Every reaction includes an internal control to monitor PCR performance and ensure reliable results.

Applications

- Water testing: Rapid and highly accurate monitoring of water quality.

Related products

- Nucleia™ 2 Tez-Q Plus ([page 75](#)): Efficient extraction kit for bacterial DNA, capturing PCR inhibitors, and providing high-quality samples ready for real-time PCR analysis.



Sample

Sample collection
Membrane filter, 0.45 µm
cellulose

Enrichment
BHI broth
8 hours

DNA extraction
Nucleia™ 2 Tez-Q Plus, [p. 76](#)
40 mins.

Real-time PCR
[Ampliora™ 3.12 WaterScan](#),
[120 mins.](#)

Data analysis
TxA software, [p. 101](#)

Time to results
11 hours

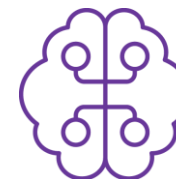
CENTRALIZING MICROBIOLOGICAL DATA TO
STOP THE SPREADING OF SPOILERS & PATHOGENS

TAAG AI SOFTWARE

Say hello to your new microbiology expert

The **TxA (TAAG Xpert Assistan)** is a **data-driven artificial intelligence** platform that will help you implement a dynamic, preventive, and proactive microbiological program. TxA will help you:

- Automatically define the best next sampling points to minimize contamination risk, with a digitalization of your food plant.
- Automatically uploaded TAAG PCR kits results.
- Have full traceability, from sampling to results.
- Easily analyze your microbiological results, statistics, warnings, smart and dynamic corrective action proposals, and much more.
- Real time learning based on your plant's microbiology, and from food industries all over the world.



TxA

Reduces your products risk of contamination.

Now you can make decisions faster and with higher quality information.

TAAG Xpert Assistant

TxA APP

Digital food environmental sampling

Dynamic and interactive plant digitalization

With the [TxA](#) app you can completely digitize your production plant, interact with it dynamically and navigate it in real time from start to finish, identifying the sampling locations and their microbiological history.

Automatic data upload

By simply scanning the QR code on the TAAG PCR kit, the information is automatically uploaded to [TxA's](#) platform, enabling complete traceability in the simplest way possible.

Scheduled testing alerts

With the [TxA](#) platform, you can schedule microbiological testing alerts so your production plant is always up to date.

TxA LAB

Automated sample information

Completely customizable

You can use the [TxA](#) portal to keep track of all your microbiological tests, including your own assays. You can customize it, adding the fields and filters that best suit your needs.

Traceability

On our platform, thanks to the digitalization of your samples and the digital map of your production plant, you'll be able to fully trace your samples, including their origin, potential risk points, and much more.

Tailor-made reports

Choose the specific information you want to display in your reports to keep a complete record and inform and share your laboratory results.

TxA QA

AI-powered complete data analysis and statistics

Centralized information

Now you can easily analyze your lab results, statistics, warnings, corrective actions, proactive suggestions, and much more, in a single, easy-to-use platform.

Real time visualization and learning

Get alerts, quality statistics, corrective actions, and dynamic recommendations from our [artificial intelligence](#), based not only on your production plant's microbiological history, but also complemented by real-world information and industry best practices.

Empower your decision-making process

Reduce the time it takes to collect samples and process data from your plant and microbiological tests, to empower your team in the most crucial aspect: decision-making.

TAAG LAB SERVICES



What makes our lab services unique

At **TAAG**, we believe in delivering much more than just a service. We care about the success of our clients, which is why our approach is all-encompassing—we aim to become the strategic partner you need.

Integrated approach

Combine multiplex PCR kits, lab services, and our AI-powered software, tailored to your needs and tailored to your needs.

Fastest result delivery in the industry

Thanks to our patented, in-house AI technologies, we are able to develop the fastest kits in the industry, achieving results as soon as 8 hours.

Automatic data analysis

Thanks to our AI, our software is able to automatically deliver interpretations of results and data analysis, allowing our clients to focus on decision-making.

Productive plant digitalization

Our AI-based TxA platform is a powerful tool that allows you to digitalize your productive plant and samplings, as well as optimize laboratory management and quality assurance.

Research & Development

At TAAG, we believe in the democratization of R&D, which is why we are committed to innovation and continuous improvement.

Global reach

We have a presence in Chile, Mexico, the U.S., and Belgium. And we're working to reach more countries with our revolutionary technology.

Technical consulting

We are committed to your success, which is why we want to support you with whatever you need. We offer technical and professional consulting to interpret and analyze results and data, as well as to propose corrective and proactive actions.

We always deliver

We have our own production plant for molecular biology kits, including kits for the detection of pathogens and spoilage agents. This provides a significant advantage for our laboratory services clients, as we can ensure stock of key reagents.

Microbiology solutions

From advanced real-time PCR kits to AI software, our comprehensive portfolio offers a wide range of solutions to take to the next level your microbiology testing. All our systems are fully integrated with each other for seamless and efficient operation across the entire production lifecycle, ensuring you consistently deliver safe, high-quality products.

Certified quality: All our laboratories are certified according to ISO 17025 and our products are manufactured at facilities certified according to ISO 13485.

Fast Pathogen and Spoilage Detection (PCR)

We have developed proprietary technologies for identification of multiple microorganisms in one single PCR reaction. Results in just 48 hours - no more waiting 5+ days.

Expert Microbiological Analysis

Culture-based microbiology with stringent quality control.

- Total aerobic count
- Lactic acid bacteria
- Coliforms and more

Next Generation DNA Sequencing services

Strain typing for traceability and for identifying the root cause of contamination, microorganism identification, determination of the baseline in your plant, authenticity testing, and beyond.

Tailored Services

Providing personalized solutions designed to fit your unique requirements:

- Biomapping of critical control points in your facility to enhance safety.
- Shelf-life studies (regular and accelerated) for product optimization.
- Challenge tests and more

Fast Pathogen and Spoilage Detection (PCR)

We have developed proprietary technologies for identification of multiple microorganisms in one single PCR reaction.

Results starting the next day

Spoilages

- TAAG FS20 Spoilage Bacteria
- TAAG FS21 Spoilage Yeast & Mold
- TAAG FSM02 Yeast and mold count
- TAAG FSM06 Lactobacillus spp. count
- TAAG FSM13 Aerobic lactic acid bacteria count
- TAAG FSM07 Mesophilic aerobic spore count
- TAAG FSM10 Spore count of thermophilic aerobes
- TAAG FSM11 Mesophilic anaerobic spore count
- TAAG FSM12 Spore count of thermophilic anaerobes
- TAAG FSM14 Acetic acid bacteria count
- TAAG FSM15 Pseudomonas count
- TAAG FSM03 Fungal spore count
- TAAG FSM 65 Yeast and Mold Count by Petrifilm
- TAAG FSM36W WaterScan
- TAAG BW03 Wine&Beer Advanced Yeast Check (With enrichment)
- TAAG BW10 Wine&Beer Advanced Yeast Check (No enrichment)
- TAAG BW02 Wine&Beer Advanced Bacteria Check (With enrichment)
- TAAG SBW09 Wine&Beer Advanced Bacteria Check (No enrichment)
- TAAG FSP47 Spoilage Beverage

Pathogens

- TAAG FSP41 VIP Lis-Ecoli-Saur-Sal
- TAAG FSP11-25 Mono Salm spp.
- TAAG FSP12-25 Mono Ecoli
- TAAG FSP13 Mono Lmon
- TAAG FSP15 Mono Saur
- TAAG FSP14 Mono Ecoli O157
- TAAG FSP17 Mono Campylobacter spp.
- TAAG FSP16 Mono Cronobacter sakazakii
- TAAG FSP110 Mono Vibrio cholerae (P/A)
- TAAG FSP110Q Mono Vibrio cholerae (S/C)
- TAAG FSP112 Mono Vibrio vulnificus (P/A)
- TAAG FSM09 Clostridium perfringens count
- TAAG FSM08 Bacillus cereus count
- TAAG FSP28 Duplex Ecoli
- TAAG FSP22 Duplex Listeria spp-Listeria monocytogenes
- TAAG FSP32 Triplex Salm - L. monocytogenes - L. spp.
- TAAG FSP37 Triplex Salm-Ecoli O157 and STEC
- TAAG FSP48 Triplex pathogenic Vibrio
- TAAG FSP45 Duplex Listeria spp and Salmonella spp
- TAAG FSP46 Triplex Salmonella spp, L. monocytogenes and E. coli O157:H7
- TAAG FSE1 Salmonella spp.
- TAAG FSE3 Salmonella spp. and Listeria spp

Next Generation DNA Sequencing services

Strain typing for traceability and for identifying the root cause of contamination, microorganism identification, determination of the baseline in your plant, authenticity testing, and beyond.

Indicators

- TAAG FSQ12 Bacterial ID
- TAAG FSQ13 Fungal ID
- TAAG FSQ14 Listeria Clonality
- TAAG FSQ15 Salmonella Clonality
- TAAG FSQ17 Bacteria Isolation
- TAAG FSQ18 Fungal Isolation
- TAAG FSQ21 Meat ID

Expert Microbiological Analysis

Culture-based microbiology with stringent quality control. Total aerobic count, Lactic acid bacteria, Coliforms and more.

Indicators

- TAAG FSM31 Mesophilic aerobic count
- TAAG FSM31 Mesophilic aerobic count by Petrifilm
- TAAG FSM19 E. coli and Coliformes count by Petrifilm
- TAAG FSM32W Total Coliforms and E. coli in water
- TAAG FSM05 Total Coliforms count by Petrifilm
- TAAG FSM30 fecal coliform count by Petrifilm
- TAAG FSM04 Enterobacterias count by Petrifilm
- TAAG FSM16 sulfite-reducing anaerobic count
- TAAG FSP18 Mono Listeria spp
- TAAG FSM29 Streptococcus thermophilus
- TAAG FSM28 Lactobacillus bulgaricus

Tailored Services

Providing personalized solutions designed to fit your unique requirements:

- Biomapping of critical control points in your facility to enhance safety.
- Shelf-life studies (regular and accelerated) for product optimization.
- Challenge tests and more

Xpert Shelf Life

Determination of the shelf life of food products through periodic microbiological and sensory studies to predict changes in flavor, odor, and texture. Additionally, expert shelf lives are provided where we start with products artificially inoculated with controlled concentrations of microorganisms to deliver results based on their initial load.

Sensory Analysis

TAAG Labs conducts sensory tests to detect microbiological alterations in food products. Consumer-level panels are used to assess color, aroma, texture, and flavor using the Karlsruhe scale.

Formulation Study

Inoculation of pathogens and spoilage microorganisms in prototypes with different ingredients or concentrations of ingredients, followed by stability tests for microbiological performance. The goal is to monitor microbial counts over time to select the formulation that minimizes spoilage and guarantees the longest shelf life for the product.

Efficacy Study of Sanitizers

Evaluate the effectiveness of sanitizers by measuring their microbial reduction capacity. Surfaces are inoculated with known loads of microorganisms for subsequent application of the disinfectant under controlled conditions. Counts are taken before and after treatment to measure the logarithmic reduction of microorganisms. Additionally, this service is available to measure the effectiveness of sanitizers on surfaces with and without biofilm generation.

Complementary lab testing: NGS and traceability

If any of the above pathogens are detected in your sample, you can send it to one of our accredited laboratories for a complimentary Next-Generation Sequencing (NGS) analysis (restrictions may apply; please contact us for details). As part of this service, we will also create a dedicated NGS database for you, allowing you to:

- Quickly determine if you have encountered this strain before by comparing it with previous events.
- Differentiate between true contamination and lab cross-contamination.
- Identify the root cause of the contamination.
- Monitor and assess if the strain is persistent in your facility.

This complementary service to our kits provides valuable insights for better contamination control and process improvement.

The Synapse Program

The Synapse Program is a comprehensive solution designed to support every aspect of microbiological testing and product development, offering seamless integration between high-quality kits, expert laboratory services, advanced software, and dedicated expert support. Together, these elements provide you with everything you need for precise pathogen detection, microbial management, and Shelf-Life determination.

1. **PCR Kits for Pathogen and Spoilage Microorganisms** – Our high-performance PCR kits enable you to efficiently detect pathogens and spoilage microorganisms, providing the foundation for accurate testing and faster decision-making.
2. **TxA Lab & TxA Environmental Services** – Once you've collected your samples, our TxA Lab and TxA Environmental services take over to provide in-depth microbiological analysis. From environmental sampling to identify contamination sources to in-lab testing for pathogen detection, we ensure your results are accurate and actionable.
3. **Xpert Shelf Life Testing** – We go beyond traditional shelf life analysis with Xpert Shelf Life, a service that involves inoculating your products with known concentrations of spoilage microorganisms. By calculating shelf life based on these specific concentrations, we offer you batch-specific shelf life data and experimental product specifications to optimize your products' longevity.
4. **NGS Services (Traceability and Microorganism Identification)** – As part of our integrated solution, we provide NGS Services for microorganism identification and traceability. With these cutting-edge sequencing capabilities, you can track contamination sources across your production process, ensuring that you can effectively address the root causes.
5. **Dedicated Microbiological Expertise** – At Synapse, we're not just providing tools; we offer hands-on support from our dedicated microbiology experts. Whether it's biomapping, investigating contamination through environmental sampling, evaluating sanitizer effectiveness, or determining microbial product specifications, our experts guide you through every step of the process to find tailored solutions to your unique challenges.
6. **Customized Developments** – We understand that every business has unique needs. That's why we work with you to develop customized solutions for your specific microbial challenges, from product formulations to process optimizations.

Through the Synapse Program, we offer a fully integrated approach that combines the best in PCR kits, laboratory services, software solutions, and expert guidance. This unified system ensures that your microbiological needs are met efficiently, accurately, and with the highest levels of expertise.

Nascence

Customized Molecular Kits Designed for Your Needs

At TAAG Technologies, we offer tailored design and customization of molecular kits to address the specific microbiological challenges of each client. Using advanced proprietary technologies enhanced with AI, we create high-precision solutions for rapid and reliable detection of key microorganisms. This allows our clients to test only what they need, with a tailor-made product to fit perfectly into their workflow. With solutions that are precise, scalable and integrated, translating to lower costs and higher throughput across the board.

Fast, Flexible, and Expert-Driven

From concept to validation, our streamlined development process ensures quick turnaround and seamless integration into your workflows — all with dedicated technical support and no extra costs

Key Benefits:

- No additional cost for customization
- Rapid development and validation
- AI-assisted design for high accuracy
- High-multiplex detection in a single test
- Adapted to your specific matrix and needs
- Faster results
- Full technical support throughout the process

TAAG

PRODUCT CATALOG

INDUSTRIAL APPLICATIONS_2025

