

# Rapidly detect & differentiate yeast spoilage organisms in beverages

Thermo Scientific<sup>™</sup> SureTect<sup>™</sup> Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay

### A rapid solution for beverage producers to detect and differentiate spoilage yeasts.

Beverage manufacturers need to rapidly identify and address spoilage yeast contamination in the production environment, raw materials and finished products. Early detection of spoilage yeasts increases operational efficiency and profitability whilst also ensuring brand protection.

In particular, *Brettanomyces* is responsible for the presence of 4-Ethylphenol in juice and high sugar beverages: its presence may affect *Saccharomyces cerevisiae* fermentation and can impact the colour, odour and taste of the produced beverages. Robust control programs are therefore essential.

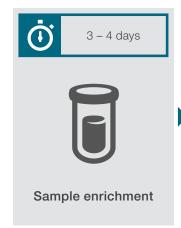
Designed in partnership with a leading beverage manufacturer, the Thermo Scientific™ SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay allows for rapid detection and differentiation of the yeast spoilage strains of concern for beverage manufacturers.

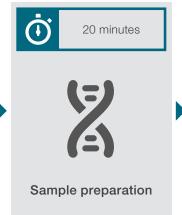


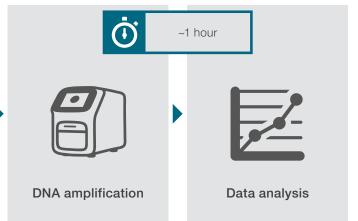
+ S. cerevisiae

### Simplify your laboratory workflow for detection and differentiation

The SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay enables a simple workflow with results available in 3-4 days supporting faster product release or response to contamination.









### A quicker path to enabling effective *Brettanomyces* spp. and *S. cerevisiae* detection and differentiation

The SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay kit includes:

- Lysis Reagent 1, pre-filled into 96-well plate
- Lysis Reagent 3
- Lysis Reagent 3 Buffer
- SureTect Brettanomyces spp. and S. cerevisiae PCR Assay Tubes
- 96-well pierceable seals (3 seals per kit)
- SureTect flat, optical PCR Caps



The SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay is an optimized solution combining speed and performance in an easy-to-use and cost-effective platform, giving robust results that you can always trust.

#### **Simple**

- ✓ Easy to use and simple workflow
- ✓ Pre-dispensed lysis reagents and lyophilized PCR reagents
- ✓ Automatic lysis cycle with very few pipetting steps

#### Fast and Flexible

- ✓ Fast screening and differentiation of Brettanomyces spp. and S. cerevisiae in a single PCR test
- Rapid detection for early actions and high confidence in production
- ✓ Test up to 96 samples in each run
- ✓ Choice of pierceable seals or caps
- ✓ Open PCR platforms

#### **Smart**

- ✓ Highly specific assay includes the three main species of Brettanomyces: B. naardenensis, B. anomalus and B. bruxellensis
- ✓ Multiplex PCR reduces cost and hands-on time compared with running separate tests for each target
- ✓ Optimized workflow with three pierceable seals to reduce risk of cross-contamination
- ✓ Intuitive, user-friendly software delivers reliable results, with no subjective interpretation
- Actionable data supports fast decisions in a complex product supply chain
- ✓ Internal positive control in every assay for complete confidence in results



### Applied Biosystems SimpliAmp Thermal Cycler

Utilize the Applied Biosystems™ SimpliAmp™ Thermal Cycler in the SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay method for PCR sample preparation, enabling workflow efficiency and reduced handling steps.

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

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



### Applied Biosystems QuantStudio 5 Food Safety Real-Time PCR System

The SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay is designed to run on the Applied Biosystems™ QuantStudio™ 5 Food Safety Real-Time PCR system.

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

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

- Intuitive and easy-to-use for all levels of experience.
   Touchscreen usability, allowing you to stay connected to your data easily
- Multiplex with ease—up to six excitation and six emission filters offer 21 different color combinations, allowing a broad range of detection chemistries and maximum multiplexing
- Get up and running quickly—factory-calibrated for accuracy, quick installation, and immediate use; preoptimized protocol templates help minimize training for new users
- Maximize benchtop space—compact instrument can be configured as a stand-alone or with a computer
- Open instrument Due to the open capability of the instrument, additional custom assays can be developed for manufacturers to support quality and safety testing programs.



## Automated reporting with Thermo Scientific RapidFinder Analysis Software

An integral part of the SureTect Brettanomyces spp. and S.cerevisiae Assay workflow, the Thermo Scientific™ RapidFinder™ Analysis Software, is a graphical, easy-to-use tool for food and environmental testing labs to optimize their pathogen detection workflow with the QuantStudio 5 Food Safety PCR System.

#### RapidFinder Analysis Software enables:

- Intuitive sample set up
- · Flexible plate layout including automatic or customisable options
- · Pre-set, optimized thermal cycling conditions per target
- Automatically generates colour coded results (presence or absence of the target)
- Reports the detection of Brettanomyces seperately from S. cerevisiae



#### Ordering information

Description	Order code
SureTect Brettanomyces spp. and S. cerevisiae Multiplex PCR Assay	A59289
Thermo Scientific SureTect Starter Pack	A56898
Applied Biosystems SimpliAmp™ Thermal Cycler	A24811
Applied Biosystems QuantStudio 5 Food Safety PCR System with laptop	A36328
QuantStudio 5 Food Safety PCR System with desktop	A36320

