D.I.E.C.

Arvada, Colorado, USA

Beer Spoilage Detection Made Easy

Beer Analyzer: genesig q16 & EASY kits

Powered by PRIMER DESIGN

DIEC offers Primerdesign's easy, fast and accurate solutions for detecting spoilers in your beer/ beverage with genesig q16:

- Sample to result under 2.5 hours
- Highly affordable – cost efficient
- Powerful underlying technology
- Sensitive – detect less than 10 bacteria
- Confidence in results
- Open platform format for use on any qPCR instrument

Contact us for more details:
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For more information visit www.diec-america.com

Detect spoilers in your beverage

Early detection of bacteria is the best method to avoid beer and beverage spoilage.

Spoilage bacteria form as part of the natural decay in the brewing process and can result in wasted product and loss of profit. Detecting these bacteria in yeast stock or in brewing equipment is the fastest and easiest way to avoid a problem.

BENEFITS

- Protect brewery's brand from product recalls
- Reduce the impact on the revenue stream
- Lowers the risk for further contamination
- In-house testing with simple implementation

Campden BRI Evaluation

The genesig q16 and kits have been evaluated by Campden BRI - the UK's largest independent organization and validation body supporting the food and drink industry worldwide.

Hop resistant Lactobacillus and Pediococcus species

Hop resistant genes horA and horC, when found in the species lactobacillus and pediococcus, enable these lactic acid producing bacteria to grow in beer. This results in beer with bitter and unpleasant flavors.

Pectinatus

Pectinatus bacteria cause beer spoilage by producing off flavors and turbidity.

Detection of these bacteria is currently carried out using conventional microbiology. However, this is complicated by the strict anaerobic conditions and lengthy incubation times required for their cultivation. Consequently, there is a need for rapid detection methods.

Pediococcus

Pediococcus is a very common spoilage bacteria often considered one of the most difficult types of bacteria to remove from an infected brewery.

Pediococci cause high acidity, buttery aroma and inhibit yeast growth, which results in decreased fermentation rates.

Traditional Microbiology vs Real-Time PCR

There are clear benefits to using real-time PCR for beer spoilage detection, as seen in the tables below.

TRADITIONAL MICROBIOLOGY	REAL-TIME PCR
TIME TO RESULT : FEW DAYS	TIME TO RESULT : 2.5 HOURS
• Between 48-72 hrs incubation • Long sample processing time • Lack of specific results • Strong possibility of False Positive	• Sample to result under 2.5 hours • Fast and accurate microbial detection • Very specific identification • Highly sensitive down to 10 copies

Open platform kit versions

As well as the genesig q16 format, we also offer all our kits in an open platform format for use on any other qPCR instrument.

BEER SPOILAGE DETECTION KITS	
PRODUCT DESCRIPTION	KIT SIZE
genesig EASY kit for hop resistant Lactobacillus and Pediococcus species	50rxn
genesig EASY kit for Pediococcus genus	50rxn
genesig EASY kit for Pectinatus genus	50rxn

For more information and to order, please visit
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