





### Affordable PCR for Winemakers

vinoBRETT combines proven diagnostic principles with innovative, proprietary PCR technology to enable accurate, rapid, and early detection of *Brettanomyces*. For the first time, winemakers can proactively manage *Brettanomyces* to mitigate the risk of producing wine tainted by the effects of 4-EP/EG. Early detection of the presence of *Brettanomyces* at any point in the winemaking process allows for proactive management to preserve wine quality.

## **AOAC International Certified for foodborne pathogen detection**



# Key benefits of implementing vinoBRETT in a proactive quality management program

- Detects Brettanomyces bruxellensis through PCR
- Accurate and sensitive with young wines and turbid samples
- Early detection minimizes costly downstream remediation
- Detects both active and VBNC Brettanomyces cells
- Sensitive down to 10 cells/mL
- Proactive *Brettanomyces* management preserves the value of wine

"We utilize vinoBRETT in our lab to provide clients with accurate and timely information about the potential for Brett contamination in their wines. This technology allows us to analyze samples during all stages of the winemaking process and provide test results within 24 hours."

-Leigh Meyering, myEnologist, Napa, CA

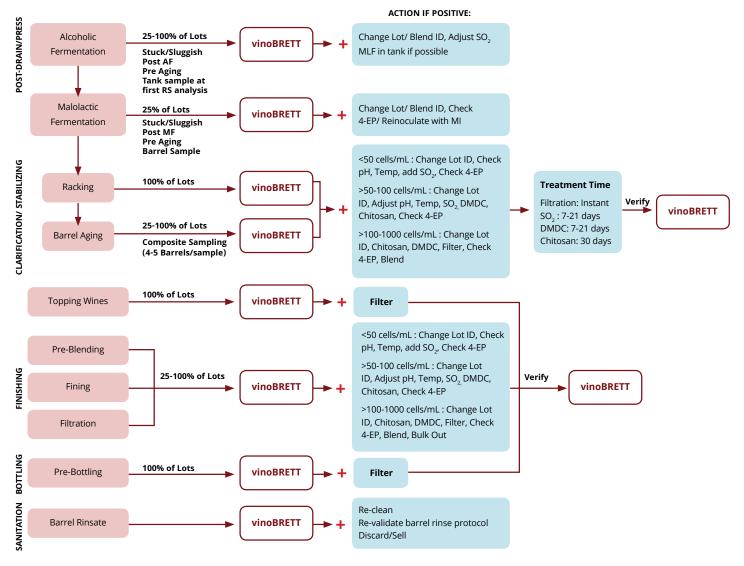
"Because we can now detect Brett sooner, our winemaker can take corrective actions before sensory impacts arise. We can isolate problem barrels or lots, and manage the impact of Brett. This tool enables us to do a better job of preserving quality."

Doris Francis, PhD, Laboratory Supervisor
J. Lohr Winery



### **Testing Flow Chart**

#### **BRETT MONITORING EXAMPLE**



Veriflow DNA Signature Capturing Technology	
DNA Amplification	Proprietary reagents eliminate need for sample purification
DNA Identification	Proprietary DNA signature detection specifically targeting <i>Brettanomyces</i>
Visualization of Results	Vertical flow mediated visualization of results for easy interpretation via hand-held cassette
Sample Preparation	No enrichment or purification steps required
Certification	AOAC International Certified for foodborne pathogen detection
Current utilization	Food and juice manufacturers, premium wineries, craft breweries; global 3rd party testing labs; U.S. and international

vinoBRETT Performance Specifications	
Sensitivity (LOD)	10 cells/ml
Time to results	< 4 hours
Matrix compatibility	Juice, wine, lees, barrel rinsate, colony PCR, enrichment broth
Assay configuration	Qualitative and quantitative
Target selection	Ribosomal Deoxyribonucleic Acid (rDNA) gene
Specificity	Brettanomyces bruxellensis
	Active state and VBNC state (Viable But Non-Culturable)

vinoBRETT Validation		
Validation Studies	Internal and external laboratory validation in collaboration with Jackson Family Wines and Enartis Vinquiry	
Inclusivity	100%. Correctly identified 49 known isolates of <i>Brettanomyces</i> bruxellensis <sup>1</sup>	
Exclusivity	100%. Correctly excluded multiple species of commonly occurring microorganisms found in wine	

<sup>&</sup>lt;sup>1</sup> Strains sourced from University of California-Davis, Wine Microbe Collection, Department of Viticulture & Enology

For more information about Brett testing from myEnologist, please call us at (707) 812-1242. For more information about the vinoBRETT test visit www.invisiblesentinel.com



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wine analysis, consulting, and supplies