

# DUPONT™ BAX® SYSTEM

Real-Time PCR Assay for *Vibrio cholerae/parahaemolyticus/vulnificus*

*Vibrio* are frequently found in coastal waters and other brackish environments, and pathogenic species can cause gastrointestinal illness when ingested by humans. Foodborne infection is typically associated with eating raw or undercooked fish and shellfish, especially oysters. For seafood processors and inspectors, current culture methods require at least 3-5 days for results and subjective interpretation. The BAX® System Real-Time PCR Assay for *Vibrio*, however, delivers differentiated results that are reliable and highly specific in less than 24 hours.



BAX® System Real-Time PCR Assay

*Vibrio cholerae/parahaemolyticus/vulnificus*

Part # D12863877

96 tests per kit

PCR tubes with tablets, optical caps, protease, lysis buffer

Store at 2-8°C

Stable to expiration date on label

## Benefits

- **SPEED** - Reliable results within 24 hours
- **ACCURACY** - clear and reproducible results, independent of operator technique
- **EASE OF USE** - minimal hands-on time, tableted PCR reagents and automated processing and analysis reduce operator error
- **CONVENIENCE** - pre-packaged PCR reagent tablets provide consistency, stability and long shelf-life
- **SUPPORT** – customer-focused dependability from DuPont to answer your questions and keep your operation running smoothly

## Features

- Up to 96 enriched samples processed in about one hour
- Clear, reproducible yes-or-no results for each *Vibrio* strain
- Can also be used with multiple dilutions of a single enrichment to perform MPN calculations
- Reliably detects 10<sup>4</sup> cfu/mL
- Excellent inclusivity/exclusivity for all three target species
- Internally validated on oysters, shrimp, scallops, crab and tuna
- LIMS-compatible electronic data for easy storage, sharing and retrieval
- Can be run with other BAX® System real-time assays

## Certifications

- **AOAC Research Institute** Performance Tested Method<sup>SM</sup> #050902



This test kit's performance was reviewed by AOAC Research Institute and was found to perform to the manufacturer's specifications.



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## Sample Preparation



### Presence/Absence Testing:

Stomach or blend 25 g sample with 225 mL alkaline peptone water. Incubate at 35°C for 16-20 hours.

### MPN Testing:

Blend sample with Phosphate Buffered Saline dilution water, then dilute to appropriate levels in alkaline peptone water. Incubate all dilution tubes at 35°C for 16-20 hours.

## BAX® System Protocol

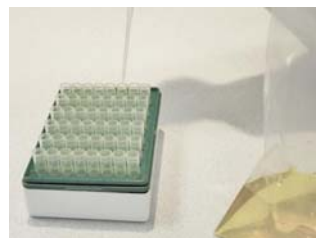
**8:00** Create rack file and warm up cycler.



**8:05** Mix protease with lysis buffer and transfer 200 µL of lysis reagent to cluster tubes.



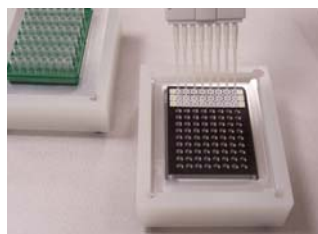
**8:10** Transfer 5 µL sample enrichment to cluster tubes.



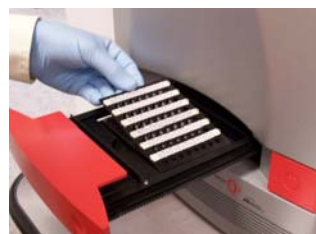
**8:20** Heat cluster tubes for 20 minutes at 37°C, then 10 minutes at 95°C.



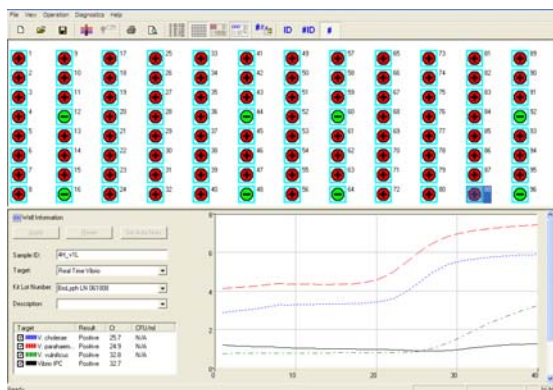
**8:50** Cool cluster tubes for 5 minutes in cooling block, then transfer 30 µL to PCR tubes in cooling block.



**9:00** Place sealed PCR tubes in cycler and run program.



**10:30** Review results.



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