

DUPONT™ BAX® SYSTEM

Real-Time PCR Assay for *Shigella*

Food companies and government labs that use standard culture methods to screen food for *Shigella* can now use the DuPont™ BAX® System to quickly eliminate negative results and reduce the number of samples that must be confirmed.

Using real-time PCR technology backed by DuPont science, the BAX® System produces reliable screening results in about one hour. Fewer presumptive positive results means reduced hands-on time and cost for culture confirmations, improving operational efficiency and leading to earlier product release decisions.



BAX® System Real-Time PCR Assay
Shigella

Part # D14812018

96 tests per kit

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

Store at 2-8°C

Stable to expiration date on label

*** Positive results with this assay are considered presumptive due to known cross-reaction with some strains of Enteroinvasive Escherichia coli (EIEC)*

Benefits

- **ACCURACY** – Sensitivity and specificity consistent with the standard culture method for *Shigella*
- **SPEED** – Negative results available in about 18 hours for most sample types
- **EFFICIENCY** – Tableted PCR reagents provide product stability and longer shelf life
- **EASE OF USE** – Simplified sample prep and easy-to-follow prompts reduce training needs

Features

- Real-time PCR processing complete in about one hour
- Validated on a variety of sample types
- Automated DNA-based analysis provides clear yes-or-no results without the need for expert interpretation
- Internal positive control included with each reaction
- Closed-cap system avoids amplicon contamination in the lab
- LIMS-compatible electronic data for easy storage, sharing and retrieval
- Includes all of the quality and technical support you've come to expect from DuPont – the original provider of automated PCR testing to the food industry

Call 800-863-6842 today!

or visit www.fooddiagnostics.dupont.com to find out more



The miracles of science™

Sample Preparation



Shigella Broth:

Prepare the *Shigella* broth with 2.5 mL novobiocin solution (50 mg novobiocin sodium salt into 1 L distilled water) to 225 mL broth.

Stomach 25 g sample with 225 mL pre-warmed (42°C) *Shigella* broth with novobiocin. Incubate at 42°C under anaerobic conditions* for 8-20 hours (for frankfurters) or 16-20 hours (for all other sample types).

** Enrichment in an anaerobic chamber is recommended. If a chamber is not available, a standard incubator can be used with as much air removed from the sample bag as possible; however, incubating without anaerobic conditions may make culture confirmation of Shigella difficult.*

BAX® System Protocol

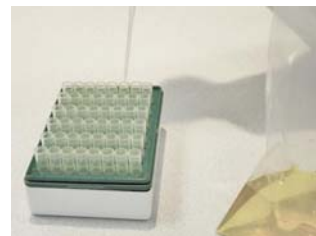
8:00 Create rack file and warm up cyclor.



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



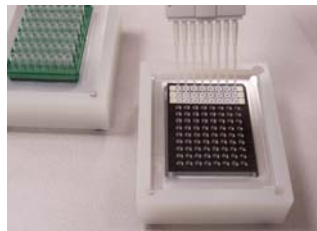
8:10 Transfer 5 µL sample enrichment to cluster tubes.



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



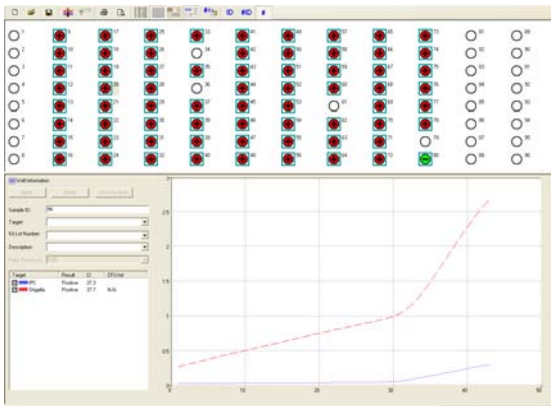
8:50 Cool cluster tubes for 5 minutes in cooling block, then transfer 30 µL to PCR tubes in cooling block.



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



10:00 Review results. Negative results are final; positive results are considered presumptive and must be confirmed with a standard culture method.



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