

DuPont Qualicon BAX[®] System

PCR ASSAY FOR *LISTERIA MONOCYTOGENES*

PRODUCT DESCRIPTION

Listeria monocytogenes is a food-borne pathogen that can grow slowly at refrigerated temperatures. The bacteria are associated with a variety of raw meats and vegetables, as well as ready-to-eat foods that get contaminated during processing. Although Listeriosis appears to be declining in the U.S., this disease can cause serious illness in persons with heightened susceptibility, especially in pregnant women and immunocompromised persons. With traditional culture methods, technicians may have trouble distinguishing *Listeria monocytogenes* from closely related organisms, and plating can take four days or more to get results. With the genetic-based BAX[®] system, however, accurate and reliable results are available about four hours after enrichment.



BAX[®] System PCR Assay *Listeria monocytogenes*

Part #D11000157 (prev. 17710609)

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 – Enrichment for most foods within 48 hours
- Accuracy – Automated DNA-based analysis instead of subjective plate counts
- Exceptional sensitivity – Reliably detects 10⁵ cfu/mL in enriched samples
- Ease of use – Tableted reagents reduce operator error
- Closed-cap system avoids amplicon contamination in the lab
- LIMS-compatible electronic data for easy storage, sharing and retrieval
- Designed for efficient workflow and reliable results

Features

- PCR processing completes 3.5 hours
- Can be run in mixed batches with other BAX[®] system targets
- Validated on raw and processed meats, fresh produce and vegetables, seafood, cultured and non-cultured dairy products, eggs and egg products, fruit juice.
- Specificity ≥98%
- Excellent inclusivity/exclusivity

Certifications



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

- AOAC International Official Method #2003.12
- AOAC Research Institute Performance Tested MethodSM #070202

Adoptions

- USDA-FSIS #MLG 8A.03

Validations and Approvals

- Brazil MAPA
- Health Canada
- China AQSIQ
- Russia Rospotrebnadzor
- Japanese Ministry of Health, Labour and Welfare



Sample preparation



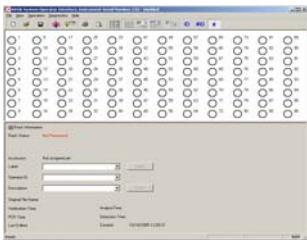
Prepare samples.

Primary enrichment: Homogenize samples (1:10) in the enrichment broth appropriate for the food type. Incubate 22-26 hours, according to details in BAX® System User Guide.

Secondary enrichment: For most foods, add 100 µL enriched sample to 9.9 mL MOPS-BLEB, and incubate at 35°C for 18-24 hours.

BAX® system protocol

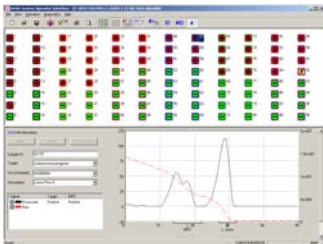
8:00 Create rack file and warm up cycler.



8:20 Heat cluster tubes for 60 minutes at 55°C, then 10 minutes at 95°C.



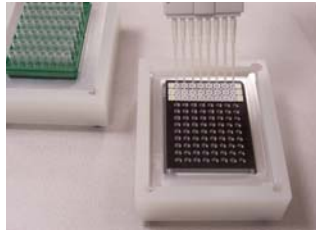
1:10 Review results.



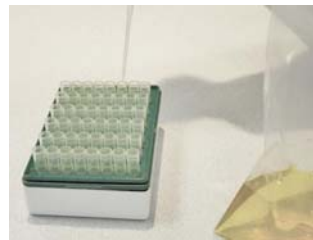
8:05 Mix protease with lysis buffer and transfer 200 µL of lysis reagent to cluster tubes.



9:30 Cool cluster tubes for 5 minutes in cooling block, then transfer 50 µL to PCR tubes in cooling block.



8:10 Transfer 5-µL samples to cluster tubes.



9:40 Place sealed PCR tubes in cycler and run program.



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