

DuPont Qualicon BAX[®] System

PCR ASSAY FOR GENUS *Listeria*

PRODUCT DESCRIPTION

The BAX[®] system PCR assay for Genus *Listeria* can help food companies monitor their environment and products for contamination with *Listeria*, which is often used as an indicator organism for other pathogens. Flexible enrichment choices provide environmental results as soon as next-day.



BAX[®] System PCR Assay Genus *Listeria*

Part # D11000147 (prev 17710610)

96 tests per kit

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

Store at 2-8°C

Stable to expiration date on label

BAX[®] System Media for *Listeria*

Part # D12232794 (prev. 17710672)
2.5 kg makes 41 L

For environmental samples ONLY

Light-colored, free-flowing dry powder

Store below 25°C in original container
away from moisture and bright light

Powder is stable to expiration date on label

Broth is gold-colored and stable for up to 5
days when stored at 42°C or 4 weeks when
stored at 2-8°C.

To prepare broth: Dissolve 60.4 g media in
1 L distilled water. Adjust pH to 7.2 ± 0.2 at
25°C, then autoclave at 121°C for 15
minutes. Do not boil.

Benefits

- Speed – Next-day results with BAX[®] system media for *Listeria*
- Flexibility – Can also use non-proprietary enrichment media
- Accuracy – Automated DNA-based analysis for objective results
- Exceptional sensitivity – 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

- Up to 96 samples processed in 3.5 hours
- Optimized media for environmentals combines a single enrichment step with shorter incubation times (24 hours for swabs; 28 hours for sponges)
 - validated on plastic, ceramic tile, rubber, painted and unpainted wood, sealed concrete, cast iron and air filter material
- Standard media can also be used to test food and environmentals after 48 hours enrichment - validated on frankfurters, salmon, cheese and spinach
- Specificity >99%
- Excellent inclusivity/exclusivity (except *L. grayi*)

Certifications



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

- AOAC Research Institute Performance Tested MethodSM #030502

Validations and Approvals

- Health Canada
- Russia Rospotrebnadzor
- Japanese Ministry of Health, Labour and Welfare



The miracles of science™

Sample preparation



Prepare samples.

Swabs with BAX® system *Listeria* Media: Wet a swab with 300-500 µL DE Neutralizing Broth or equivalent, swipe a 2.5 x 2.5 cm area and drop it into 10 mL prepared BAX® system *Listeria* broth. Incubate at 36±2°C for 22-26 hours.

Sponges with BAX® system *Listeria* Media: Wet a sponge with 10 mL DE Neutralizing Broth or equivalent, swipe a 10 x 10 cm area and drop it into 190 mL prepared BAX® system *Listeria* broth. Incubate at 36±2°C for 26-30 hours.

Sponges with Standard Media: Sample a 4 x 4 inch (10 x 10 cm) environmental area, and place the sponge into 190 mL of Demi-Fraser broth. Incubate at 30°C for 22-26 hours. Then, add 100 µL enriched sample to 9.9 mL MOPS-BLEB broth (1:100 dilution). Incubate at 35°C for 18-24 hours.

Food with Standard Media: Blend 25 g samples in 225 mL Demi-Fraser broth. Incubate at 30°C for 22-26 hours. Then, add 100 µL enriched sample to 9.9 mL MOPS-BLEB broth (1:100 dilution). Incubate at 35°C for 18-24 hours.

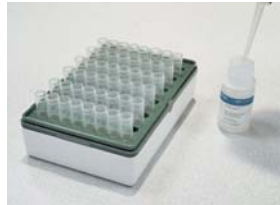
Step-by-step directions are in the *BAX® System User Guide*, included with purchase.

BAX® system protocol

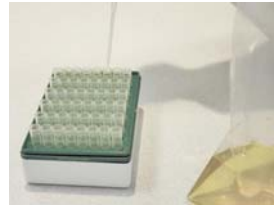
8:00 Create rack file and warm up cycler.



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



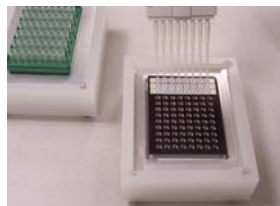
8:10 Transfer 5-µL samples to cluster tubes.



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



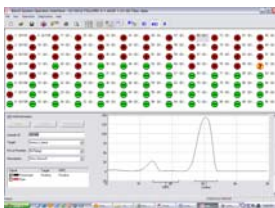
9:30 Cool cluster tubes for 5 minutes in cooling block, then transfer 50 µL to PCR tubes in cooling block.



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



1:10 Review results.



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