

DuPont Qualicon BAX[®] System

PCR ASSAY FOR *L. MONOCYTOGENES* 24E

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. This disease can cause serious illness in persons with heightened susceptibility, especially pregnant women and immunocompromised persons. Traditional culture methods can take four days or more to get results, and many rapid methods require a two-stage, 48-hour enrichment. With this BAX[®] system assay, however, accurate and reliable results are available the next day with a single step, 24-hour enrichment.



BAX[®] System PCR Assay *L. monocytogenes* 24E

Part # D13608125

96 tests per kit

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

Store at 2-8°C

Stable to expiration date on label

24 LEB Media

24 LEB Base

Part # D13921126 or Oxoid CM1107 –
500-g bottle

Store at 10-30°C

24 LEB Supplement

Part #D13921133 or Oxoid SR0243 –
10-vial packs

Store at 2-8°C

24 LEB Buffer Supplement (AFNOR-
required for some matrices **only**)

Oxoid BO1204E – 24 bottles of 10 mL

Oxoid BO1204M – 10 bottles of 100 ml

Store at 2-8°C

Benefits

- Speed – Single-stage enrichment complete in only 24 hours
- Accuracy – Automated DNA-based analysis
- Exceptional sensitivity – Detects 10⁴ cfu/mL
- 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 in 3.5 hours
- Can be run in mixed batches with other BAX[®] system standard assays
- Validated on meat, seafood, dairy, vegetable and environmental samples
- 100% inclusivity/exclusivity
- Next-day results with 24-hr Listeria Enrichment Broth (24 LEB)
 - 96 food tests use 2 bottles of base and 5 packs (50 vials) of supplement
 - 96 environmental tests use 1 bottle of base and 2 packs (20 vials) of supplement

Approvals



AOAC Research Institute Performance Tested MethodSM #080901 - Validated on frankfurters, spinach, shrimp, queso fresco cheese and stainless steel



AFNOR validation certificate #QUA 18/05-07/08 – Certified according to AFNOR validation rules for human food products* and environmentals.

*Smoked fish and raw charcuteries require the use of 24 LEB buffer supplement.



The miracles of science[™]

Sample preparation



Enrichment

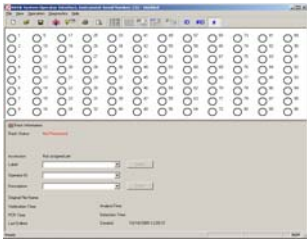
This assay requires 24 LEB for best results. See package insert for media preparation.

Food – Homogenize samples (1:10) in room-temperature (25-30°C) prepared 24 LEB using filterless stomacher bags. Incubate 24 hours at 37°C.

Environmentals – Wipe 4 x 4 in (10 x 10 cm) area with sponge pre-moistened in DE neutralizing broth. Add to 90 mL room-temperature (25-30°C) prepared 24 LEB and mix. Incubate 24 hours at 37°C.

BAX® system protocol

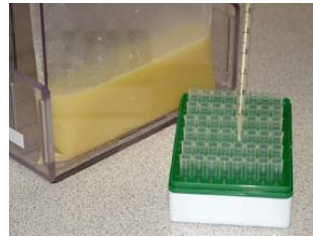
10:00 Create rack file and warm up cycler.



10:05 Dilute Lysing agent 1 with 1.8 mL sterile water, and combine in 4:1 ratios with Lysing agent 2



10:10 Transfer 50 µL of combined agents to cluster tubes, then add 0.5 mL enriched sample and incubate for 30 minutes at 37°C.



10:50 Mix protease with lysis buffer and transfer 200 µL of lysis reagent to new cluster tubes.



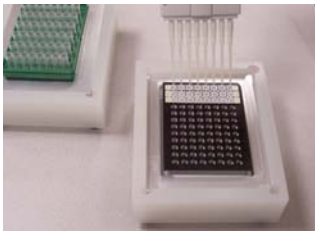
10:55 Transfer 5 µL of lysate to cluster tubes.



11:00 Heat cluster tubes for 30 minutes at 55°C, then 10 minutes at 95°C. Cool for 5 minutes in lysis cooling block.



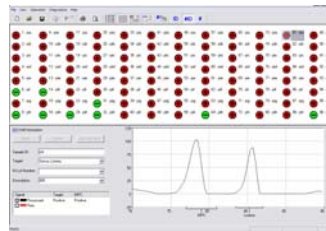
11:45 Hydrate PCR tablets in second cooling block with 30 µL of chilled lysate.



11:50 Place sealed PCR tubes in cycler and run program.



3:20 Review results.



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