**PRODUCT DESCRIPTION**

*Listeria* species are indicator organisms whose detection can indicate that pathogenic *Listeria monocytogenes* is present. *Listeria monocytogenes* 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.

**Benefits**
- Speed – Single-stage enrichment complete in only 24 hours
- Accuracy – Automated DNA-based analysis
- Exceptional sensitivity – Detects $10^4$ 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
- Detects all species of *Listeria* except some strains of *L. grayi*
- 100% exclusivity
- Next-day results with 24 LEB media
  - 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**
- AFNOR validation certificate #QUA 18/06 – 07/08

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**DuPont Qualicon BAX® System**

**PCR ASSAY FOR GENUS *LISTERIA* 24E**

**BAX® System PCR Assay**

**Genus *Listeria* 24E**

<table>
<thead>
<tr>
<th>Part #</th>
<th>D13608135</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 tests per kit</td>
<td></td>
</tr>
<tr>
<td>PCR tubes with tablets, optical caps, lysis agents, protease, lysis buffer</td>
<td></td>
</tr>
<tr>
<td>Store at 2-8°C</td>
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</tr>
<tr>
<td>Stable to expiration date on label</td>
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</table>

**24 LEB Enrichment Media**

(required for 24E assay)

<table>
<thead>
<tr>
<th>Part #</th>
<th>D13921126 or Oxoid CM1107</th>
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<tbody>
<tr>
<td>24 LEB Base</td>
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<tr>
<td>500-g bottle</td>
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</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>D13921133 or Oxoid SR0243</th>
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<tbody>
<tr>
<td>24 LEB Supplement</td>
<td></td>
</tr>
<tr>
<td>10-vial pack</td>
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</table>

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This assay has been certified according to AFNOR validation rules for human food products (except smoked fish) and environmental.
Sample preparation

**Enrichment**

*This assay requires 24 LEB enrichment broth for best results. See package insert for broth preparation.*

- **Food** – Homogenize samples (1:10) in room-temperature (25-30°C) prepared 24 LEB enrichment broth 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 enrichment broth 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 50 µL of chilled lysate.
- **11:50** Place sealed PCR tubes in cycler and run program.
- **3:20** Review results.

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