# Detection of Foodborne Bacterial Pathogens from Individual Filth Flies

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URL: https://www.jove.com/video/52372  
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## Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bismuth sulfite (BS) agar</td>
<td>Fisher Scientific</td>
<td>R452402</td>
<td>*Multiple suppliers.</td>
</tr>
<tr>
<td>Brain heart infusion (BHI) broth</td>
<td>Becton, Dickson and Company</td>
<td>299070</td>
<td>*Pre-warmed to 37°C. Multiple suppliers.</td>
</tr>
<tr>
<td>Brilliance Listeria agar (BLA)</td>
<td>Fisher Scientific</td>
<td>CM1080B</td>
<td>*Multiple suppliers.</td>
</tr>
<tr>
<td>Buffered peptone water (BPW)</td>
<td>Becton, Dickson and Company</td>
<td>212367</td>
<td>*Pre-warmed to 37°C or 42°C. Multiple suppliers.</td>
</tr>
<tr>
<td>chromID Sakazakii Agar</td>
<td>bioMérieux</td>
<td>43741</td>
<td>*Call for information: 800.682.2666</td>
</tr>
<tr>
<td>R &amp; F Enterobacter sakazakii (Cronobacter) Chromogenic Plating Medium</td>
<td>R &amp; F Laboratories</td>
<td>Various</td>
<td>*Call for information: +1.630.969.530</td>
</tr>
<tr>
<td>R &amp; F Enterobacter sakazakii Enrichment Broth and supplement</td>
<td>R &amp; F Laboratories</td>
<td>Various</td>
<td>*Call for information: +1.630.969.530</td>
</tr>
<tr>
<td>Hektoen enteric (HE) agar</td>
<td>Fisher Scientific</td>
<td>OXCM0419B</td>
<td>*Multiple suppliers.</td>
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<tr>
<td>Listeria selective enrichment supplement</td>
<td>Oxoid</td>
<td>SR0243</td>
<td>*Multiple suppliers.</td>
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<tr>
<td>Novobiocin</td>
<td>Fisher Scientific</td>
<td>OXSR0181E</td>
<td>*Multiple suppliers. Store at 2-8 °C</td>
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<tr>
<td>Vancomycin hydrochloride hydrate</td>
<td>Sigma Aldrich</td>
<td>861987</td>
<td>Store at 2-8 °C</td>
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<tr>
<td>Cefsulodin sodium salt hydrate</td>
<td>Sigma Aldrich</td>
<td>C8145</td>
<td>Store at 2-8 °C</td>
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<tr>
<td>Rappaport-Vassiliadis (RV) medium</td>
<td>Fisher Scientific</td>
<td>CM0669B</td>
<td>*Multiple suppliers.</td>
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<tr>
<td>Tetrathionate (TT) Broth</td>
<td>Becton, Dickson and Company</td>
<td>249120</td>
<td>*Multiple suppliers.</td>
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<tr>
<td>Trypticase soy agar (TSA)</td>
<td>Becton, Dickson and Company</td>
<td>236930</td>
<td>*Multiple suppliers.</td>
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<tr>
<td>Xylose lysine desoxycholate (XLD) agar</td>
<td>Becton, Dickson and Company</td>
<td>221384</td>
<td>*Multiple suppliers.</td>
</tr>
<tr>
<td>API Biochemical identification system</td>
<td>bioMérieux</td>
<td>Various</td>
<td>*Call for information: +1.800.682.2666</td>
</tr>
<tr>
<td>VITEK 2: Product Safety</td>
<td>bioMérieux</td>
<td>Various</td>
<td>*Call for information: +1.800.682.2667</td>
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<tr>
<td>BAX System Q7</td>
<td>DuPont</td>
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<tr>
<td>BAX E. sakazakii Standard assay kit</td>
<td>DuPont</td>
<td>D11801836</td>
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<tr>
<td>BAX L. monocytogenes 24E assay kit</td>
<td>DuPont</td>
<td>D13608125</td>
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<tr>
<td>BAX Salmonella 2 Standard assay kit</td>
<td>DuPont</td>
<td>D14368501</td>
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### Equipment and Materials

<table>
<thead>
<tr>
<th>Item</th>
<th>Supplier</th>
<th>Code/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capping tool</td>
<td>DuPont</td>
<td>D11677028</td>
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<tr>
<td>Decapping tool</td>
<td>DuPont</td>
<td>D11134095</td>
</tr>
<tr>
<td>PCR tube rack/holder</td>
<td>DuPont</td>
<td>D12701663</td>
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<tr>
<td>Featherweight forceps, wide tip</td>
<td>BioQuip</td>
<td>4750</td>
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<tr>
<td>Fine point, straight tip forceps</td>
<td>BioQuip</td>
<td>4731</td>
</tr>
<tr>
<td>Zirconia/silica beads, 0.5 mm</td>
<td>Bio Spec Products, Inc.</td>
<td>11079105z</td>
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<tr>
<td>Petri dishes - 60X15mm</td>
<td>Fisher Scientific</td>
<td>08-772B</td>
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<tr>
<td>Disposable inoculating loops, 10µL</td>
<td>Fisher Scientific</td>
<td>22-363-606</td>
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<tr>
<td>L-shaped cell spreaders</td>
<td>Fisher Scientific</td>
<td>14-665-230</td>
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<tr>
<td>Microcentrifuge tubes, 2 ml</td>
<td>Fisher Scientific</td>
<td>Various</td>
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<tr>
<td>Cluster tubes</td>
<td>Fisher Scientific</td>
<td>05-500-13</td>
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<tr>
<td>Cluster tubes caps</td>
<td>Fisher Scientific</td>
<td>05-500-23</td>
</tr>
<tr>
<td>Sodium hypochlorite (Liquid chlorine bleach)</td>
<td></td>
<td>*Dilute to 0.05% with water. Multiple suppliers.</td>
</tr>
<tr>
<td>Sterile deionized water</td>
<td></td>
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<tr>
<td>Sterile distilled water</td>
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<tr>
<td>Ethyl alcohol 190 proof</td>
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<td>*Dilute to 70% with water when needed. Multiple suppliers.</td>
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<tr>
<td>Genie cell disruptor, 120V - for 1.5ml and 2.0ml microtubes</td>
<td>Scientific Industries, Inc.</td>
<td>SI-D238</td>
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<tr>
<td>Heating block</td>
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<td>Cooling block</td>
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<tr>
<td>Recirculating water bath</td>
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<tr>
<td>Stereo microscope</td>
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<tr>
<td>Centrifuge</td>
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<tr>
<td>Incubator</td>
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</tbody>
</table>

Sterilize before use. Multiple suppliers.