# Materials List for:

**Optimization of a Multiplex RNA-based Expression Assay Using Breast Cancer Archival Material**

Shawn Baldacchino¹, Christian Saliba², Jeanesse Scerri³, Christian Scerri³, Godfrey Grech¹

¹Department of Pathology, Faculty of Medicine & Surgery, University of Malta
²Centre for Molecular Medicine and Biobanking, University of Malta
³Department of Physiology & Biochemistry, Faculty of Medicine and Surgery, University of Malta

Correspondence to: Godfrey Grech at godfrey.grech@um.edu.mt

URL: [https://www.jove.com/video/57148](https://www.jove.com/video/57148)

DOI: [doi:10.3791/57148](https://doi.org/10.3791/57148)

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microtome</td>
<td>Leica</td>
<td>RM2235</td>
<td></td>
</tr>
<tr>
<td>Hematoxylin Mayer's</td>
<td>Sigma</td>
<td>MHS16-500mL</td>
<td></td>
</tr>
<tr>
<td>Eosin Y Aquaeous solution</td>
<td>Sigma</td>
<td>HT110216-500mL</td>
<td></td>
</tr>
<tr>
<td>Normal Rabbit Serum</td>
<td>Monosan</td>
<td>MONX10963</td>
<td>Working dilution: 1/40</td>
</tr>
<tr>
<td>Biotinylated Rabbit anti-mouse</td>
<td>Dako</td>
<td>E0354</td>
<td>Working dilution: 1/200</td>
</tr>
<tr>
<td>ER antibody (6F11)</td>
<td>Vector Laboratories</td>
<td>VPE614</td>
<td>Working dilution: 1/45</td>
</tr>
<tr>
<td>HER2 antibody (CB11)</td>
<td>Novocastra</td>
<td>CB11-L-CE</td>
<td>Working dilution: 1/325</td>
</tr>
<tr>
<td>Ki67 antibody (MIb-1)</td>
<td>Dako</td>
<td>M7240</td>
<td>Working dilution: 1/500</td>
</tr>
<tr>
<td>Avidin Biotin Complex kit</td>
<td>Vector Laboratories</td>
<td>PK-6100</td>
<td></td>
</tr>
<tr>
<td>Nikon Eclipse Ti-E Inverted</td>
<td>Nikon</td>
<td>Ti-E</td>
<td>4x, 10x, 20x and 40x objectives</td>
</tr>
<tr>
<td>Laser Micorossection membranes</td>
<td>Molecular Machines &amp;Industries</td>
<td>S0103</td>
<td></td>
</tr>
<tr>
<td>mmi CellCamera 1.4</td>
<td>Molecular Machines &amp;Industries</td>
<td>MX4285c-ACK07</td>
<td></td>
</tr>
<tr>
<td>mmi Cellcut Plus</td>
<td>Molecular Machines &amp;Industries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diffuser caps</td>
<td>Molecular Machines &amp;Industries</td>
<td>50210</td>
<td></td>
</tr>
<tr>
<td>mmi Celltools Software v.4.01rcl</td>
<td>Molecular Machines &amp;Industries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eppendorf Thermomixer comfort</td>
<td>Eppendorf</td>
<td>5355000038</td>
<td></td>
</tr>
<tr>
<td>1.5mL heating block for Eppendorf</td>
<td>Eppendorf</td>
<td>22670522</td>
<td></td>
</tr>
<tr>
<td>96-well plate heating block for</td>
<td>Eppendorf</td>
<td>22670565</td>
<td></td>
</tr>
<tr>
<td>2.0 Assay Kit (Magnetic Separation)</td>
<td>Eppendorf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labnet Vortemp 56 Shaking incubator</td>
<td>Labnet</td>
<td>52056A-220</td>
<td></td>
</tr>
<tr>
<td>LX200 100/200</td>
<td>Luminex</td>
<td></td>
<td>Magnetic bead analyser</td>
</tr>
<tr>
<td>Invitrogen QuantiGene Sample</td>
<td>ThermoFisher Scientific</td>
<td>QS0109</td>
<td></td>
</tr>
<tr>
<td>Processing Kit - FFPE Tissues</td>
<td>ThermoFisher Scientific</td>
<td>QS0109</td>
<td></td>
</tr>
<tr>
<td>Invitrogen QuantiGene Plex 2.0</td>
<td>ThermoFisher Scientific</td>
<td>QP1011</td>
<td></td>
</tr>
<tr>
<td>Assay Kit (Magnetic Separation)</td>
<td>ThermoFisher Scientific</td>
<td>QP1011</td>
<td></td>
</tr>
<tr>
<td>Thermaseal RTS Sealing Film</td>
<td>Thermaseal</td>
<td>765246</td>
<td></td>
</tr>
<tr>
<td>Hand-Held Magnetic Plate Washer</td>
<td>ThermoFisher Scientific</td>
<td>QP1011</td>
<td></td>
</tr>
<tr>
<td>Invitrogen QuantiGene Incubator</td>
<td>Affymetrix/Panomics</td>
<td>QS0517</td>
<td></td>
</tr>
<tr>
<td>Temperature Validation Kit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proteinase K (50µg/µL)</td>
<td>ThermoFisher Scientific</td>
<td>14622</td>
<td></td>
</tr>
<tr>
<td>Invitrogen QuantiGene Plex 2.0</td>
<td>ThermoFisher Scientific</td>
<td>Various</td>
<td></td>
</tr>
<tr>
<td>Sets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>Manufacturer</td>
<td>Model/Part Number</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>Multi Speed Vortex</td>
<td>Kisker Biotech</td>
<td>MSV-3500</td>
<td></td>
</tr>
<tr>
<td>Sonicator</td>
<td>Silvercrest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNASEZAP</td>
<td>Sigma</td>
<td>R2020-250ML</td>
<td></td>
</tr>
<tr>
<td>Aluminium 96-well plate seal</td>
<td>Sigma</td>
<td>Z721549-100EA</td>
<td></td>
</tr>
<tr>
<td>Temperature Validation Kit</td>
<td>ThermoFisher Scientific</td>
<td>QS0517</td>
<td></td>
</tr>
<tr>
<td>RapidMiner Studio Community 7.1.001</td>
<td>RapidMiner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hybridisation oven</td>
<td>Hybaid (Thermo Scientific)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data Science Platform</td>
<td></td>
</tr>
</tbody>
</table>