<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Place the top chamber sensor side down on CIM Plate 16 Assembly tool. Blue dots of Assembly Tool and top chamber should be facing toward back or away from you.</td>
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<tr>
<td>3.</td>
<td><strong>Add 50µl of matrigel</strong> solution into top chamber well. <strong>Avoid trapped air bubbles in the matrigel. Do not puncture membrane!</strong></td>
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<td>4.</td>
<td><strong>Remove 30µl of matrigel</strong> solution from each well.</td>
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<tr>
<td>5.</td>
<td>Cover top chamber with lid and place Assembly Tool containing top chamber in 37ºC incubator for <strong>4hrs.</strong></td>
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<tr>
<td>6.</td>
<td>Place CIM-Plate 16 assembly tool inside hood with blue spots away from you.</td>
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<tr>
<td>7.</td>
<td>Place the bottom chamber in cavity of the assembly tool. <strong>The blue spot on the bottom chamber should match up with the blue spot on the assembly tool.</strong></td>
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<tr>
<td>8.</td>
<td>Fill bottom chamber wells with <strong>160µl of media. Ensure a pronounced convex meniscus is formed. Remove any air bubbles.</strong></td>
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<tr>
<td>9.</td>
<td>Turn the assembly tool 90° counter-clockwise. The blue dots should face left.</td>
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<tr>
<td>10.</td>
<td>Remove the top chamber from incubator and lower top chamber onto the bottom chamber. Push the top chamber downwards to lock the top and bottom chambers together.</td>
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<tr>
<td>11.</td>
<td><strong>Add 50µl serum free media</strong> to each well of top chamber to cover membrane surface. <strong>Avoid air bubbles. Do not puncture membrane!</strong></td>
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<tr>
<td>12.</td>
<td>Insert the assembled CIM-Plate 16 into cradle of RTCA DP Analyzer inside the 37ºC incubator. Allow membrane to equilibrate for <strong>1hr.</strong></td>
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<tr>
<td>13.</td>
<td>Perform background measurement. Start Step 1 of schedule (1 sweep for 1min).</td>
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<tr>
<td>14.</td>
<td><strong>Add 100µl cell suspension</strong> to top chamber. Leave CIM-Plate 16 in the hood for <strong>30min.</strong></td>
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<tr>
<td>15.</td>
<td>Insert the CIM-Plate 16 into cradle of RTCA DP Analyzer. Start Step 2 of schedule (sweeps 15min for <strong>24hr.</strong></td>
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