<table>
<thead>
<tr>
<th>Assay Name/Specification</th>
<th>Lot #1361803</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antibiotic Resistance (Tetracycline)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Ampicillin)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Chloramphenicol)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Chloramphenicol will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Kanamycin)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Nitrofurantoin)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Nitrofurantoin will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Spectinomycin)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Streptomycin)</strong></td>
<td>Pass</td>
</tr>
<tr>
<td>- 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Streptomycin will not form colonies after incubation for 16 hours at 37°C.</td>
<td></td>
</tr>
<tr>
<td>Assay Name/Specification (minimum release criteria)</td>
<td>Lot #1361803</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Blue-White Screening (α-complementation, Competent Cells)</strong> - NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Phage Resistance (Φ 80)</strong> - 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate does not support plaque formation by phage Φ 80 after incubation for 16 hours at 37°C.</td>
<td>Pass</td>
</tr>
<tr>
<td><strong>Transformation Efficiency</strong> - 50 µl of NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) cells were transformed with 100 pg of pUC19 DNA using the transformation protocol provided. Incubation overnight on LB-Ampicillin plates at 37°C resulted in &gt;1 x 10^9 cfu/µg of DNA.</td>
<td>Pass</td>
</tr>
</tbody>
</table>