Product Name: NEB Express Competent E. coli (High Efficiency)
Catalog #: C2523B
Shelf Life: 24 months
Storage Temp: -80°C
Specification Version: PS-C2523B v1.0
Effective Date: 09 Mar 2016

<table>
<thead>
<tr>
<th>Assay Name/Specification (minimum release criteria)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antibiotic Resistance (Nitrofurantoin)</strong> - 15 µl of untransformed NEB Express Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Nitrofurantoin will form colonies after incubation for 16 hours at 37°C.</td>
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<tr>
<td><strong>Antibiotic Sensitivity (Ampicillin)</strong> - 15 µl of untransformed NEB Express 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>
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<tr>
<td><strong>Antibiotic Sensitivity (Chloramphenicol)</strong> - 15 µl of untransformed NEB Express 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>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Kanamycin)</strong> - 15 µl of untransformed NEB Express 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>
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<tr>
<td><strong>Antibiotic Sensitivity (Spectinomycin)</strong> - 15 µl of untransformed NEB Express 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>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Streptomycin)</strong> - 15 µl of untransformed NEB Express 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>
</tr>
<tr>
<td><strong>Antibiotic Sensitivity (Tetracycline)</strong> - 15 µl of untransformed NEB Express Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.</td>
</tr>
<tr>
<td><strong>Phage Resistance (Φ 80)</strong> - 15 µl of untransformed NEB Express 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>
</tr>
<tr>
<td><strong>Transformation Efficiency</strong> - 50 µl of NEB Express 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;0.6 x 10e9 cfu/µg of DNA.</td>
</tr>
</tbody>
</table>

Derek Robinson
Director of Quality Control

Date 09 Mar 2016

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