Product Name: NEB® Stable Competent E. coli (High Efficiency)  
Catalog Number: C3040H  
Packaging Lot Number: 10131883  
Expiration Date: 12/2022  
Storage Temperature: -80°C  
Specification Version: PS-C3040H/I v1.0

### NEB® Stable Competent E. coli (High Efficiency) Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>N3041AVIAL</td>
<td>pUC19 Vector</td>
<td>10119396</td>
<td>Pass</td>
</tr>
<tr>
<td>C3040HVIAL</td>
<td>NEB® Stable Competent E. coli (High Efficiency)</td>
<td>10119664</td>
<td>Pass</td>
</tr>
<tr>
<td>B903SSVIAL</td>
<td>NEB® 10-beta/Stable Outgrowth Medium</td>
<td>10107514</td>
<td>Pass</td>
</tr>
</tbody>
</table>

### Assay Name/Specification

#### Antibiotic Resistance (Streptomycin)

15 µl of untransformed NEB® Stable Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Streptomycin will form colonies after incubation for 16 hours at 37°C.  

Lot # 10131883  
Pass

#### Antibiotic Resistance (Tetracycline)

15 µl of untransformed NEB® Stable Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will form colonies after incubation for 16 hours at 37°C.  

Pass

#### Antibiotic Sensitivity (Ampicillin)

15 µl of untransformed NEB® Stable 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.  

Pass

#### Transformation Efficiency

50 µl of NEB® Stable 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 >1 x 10e9 cfu/µg of DNA.  

Pass

#### Blue-White Screening (α-complementation, Competent Cells)

NEB® Stable Competent E. coli (High Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.  

Pass
<table>
<thead>
<tr>
<th>Assay Name/Specification</th>
<th>Lot # 10131883</th>
</tr>
</thead>
</table>
| **Phage Resistance (φ 80)**
15 μl of untransformed NEB® Stable 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. | Pass |
| **Antibiotic Sensitivity (Chloramphenicol)**
15 μl of untransformed NEB® Stable 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. | Pass |
| **Antibiotic Sensitivity (Spectinomycin)**
15 μl of untransformed NEB® Stable 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. | Pass |
| **Antibiotic Sensitivity (Nitrofurantoin)**
15 μl of untransformed NEB® Stable 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. | Pass |
| **Antibiotic Sensitivity (Kanamycin)**
15 μl of untransformed NEB® Stable 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. | Pass |

This product has been tested and shown to be in compliance with all specifications.

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09 Dec 2021

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