

## New England Biolabs Certificate of Analysis

Product Name: NEB® Stable Competent *E. coli* (High Efficiency)  
 Catalog Number: C3040H  
 Lot Number: 10013430  
 Expiration Date: 05/2019  
 Storage Temperature: -80°C  
 Specification Version: PS-C3040H/I v1.0

NEB® Stable Competent <i>E. coli</i> (High Efficiency) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10010689	Pass
C3040HVIAL	NEB® Stable Competent <i>E. coli</i> (High Efficiency)	10008771	Pass
B9035SVIAL	NEB® 10-beta/Stable Outgrowth Medium	0281806	Pass

Assay Name/Specification	Lot # 10013430
<p><b>Phage Resistance (<math>\phi</math> 80)</b>            15 <math>\mu</math>l of untransformed NEB® Stable Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate does not support plaque formation by phage <math>\phi</math> 80 after incubation for 16 hours at 37°C.</p>	Pass
<p><b>Blue-White Screening (<math>\alpha</math>-complementation, Competent Cells)</b>            NEB® Stable Competent <i>E. coli</i> (High Efficiency) were shown to be suitable for blue/white screening by <math>\alpha</math>-complementation of the <math>\beta</math>-galactosidase gene using pUC19.</p>	Pass
<p><b>Transformation Efficiency</b>            50 <math>\mu</math>l of NEB® Stable Competent <i>E. coli</i> (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 <math>&gt;1 \times 10^9</math> cfu/<math>\mu</math>g of DNA.</p>	Pass
<p><b>Antibiotic Sensitivity (Spectinomycin)</b>            15 <math>\mu</math>l of untransformed NEB® Stable Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass
<p><b>Antibiotic Sensitivity (Kanamycin)</b>            15 <math>\mu</math>l of untransformed NEB® Stable Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass

Assay Name/Specification	Lot # 10013430
<p><b>Antibiotic Sensitivity (Nitrofurantoin)</b> 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.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Chloramphenicol)</b> 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.</p>	<b>Pass</b>
<p><b>Antibiotic Resistance (Tetracycline)</b> 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.</p>	<b>Pass</b>
<p><b>Antibiotic Resistance (Streptomycin)</b> 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.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Ampicillin)</b> 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.</p>	<b>Pass</b>

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



Lixin An  
Production Scientist  
25 May 2018



Nick Privitera  
Packaging Quality Control Inspector  
20 Jun 2018