

## New England Biolabs Certificate of Analysis

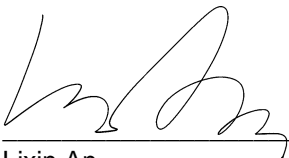
Product Name: NEB<sup>®</sup> Stable Competent *E. coli* (High Efficiency)  
 Catalog Number: C3040I  
 Lot Number: 10013431  
 Expiration Date: 06/2019  
 Storage Temperature: -80°C  
 Specification Version: PS-C3040H/I v1.0

NEB <sup>®</sup> 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
C3040IVIAL	NEB <sup>®</sup> Stable Competent <i>E. coli</i> (High Efficiency)	10007282	Pass
B9035SVIAL	NEB <sup>®</sup> 10-beta/Stable Outgrowth Medium	0281806	Pass

Assay Name/Specification	Lot # 10013431
<p><b>Transformation Efficiency</b>            50 µl of NEB<sup>®</sup> 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 &gt;1 x 10e9 cfu/µg of DNA.</p>	Pass
<p><b>Phage Resistance (φ 80)</b>            15 µl of untransformed NEB<sup>®</sup> Stable Competent <i>E. coli</i> (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.</p>	Pass
<p><b>Blue-White Screening (α-complementation, Competent Cells)</b>            NEB<sup>®</sup> Stable Competent <i>E. coli</i> (High Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</p>	Pass
<p><b>Antibiotic Sensitivity (Spectinomycin)</b>            15 µl of untransformed NEB<sup>®</sup> 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 µl of untransformed NEB<sup>®</sup> 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 # 10013431
<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  
21 Jun 2018



Corey Rabeau  
Packaging Quality Control Inspector  
21 Jun 2018