

## New England Biolabs Certificate of Analysis

**Product Name:** NEBExpress® Competent *E. coli* (High Efficiency)  
**Catalog Number:** C2523H  
**Packaging Lot Number:** 10244999  
**Expiration Date:** 03/2026  
**Storage Temperature:** -80°C  
**Specification Version:** PS-C2523H/I v2.0

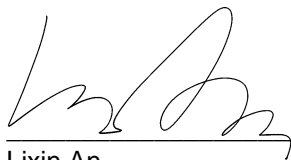
NEBExpress® Competent <i>E. coli</i> (High Efficiency) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10236883	Pass
C2523HVIAL	NEBExpress® Competent <i>E. coli</i> (High Efficiency)	10176432	Pass
B9020SVIAL	SOC Outgrowth Medium	10222590	Pass

Assay Name/Specification	Lot # 10244999
<b>Antibiotic Resistance (Nitrofurantoin)</b> 15 µl of untransformed NEBExpress® Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Nitrofurantoin will form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Ampicillin)</b> 15 µl of untransformed NEBExpress® Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Chloramphenicol)</b> 15 µl of untransformed NEBExpress® Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Chloramphenicol will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Kanamycin)</b> 15 µl of untransformed NEBExpress® 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.	<b>Pass</b>
<b>Antibiotic Sensitivity (Spectinomycin)</b> 15 µl of untransformed NEBExpress® Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after incubation	<b>Pass</b>

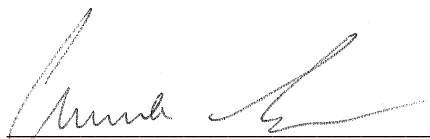
Assay Name/Specification	Lot # 10244999
<p>for 16 hours at 37°C.</p> <p><b>Antibiotic Sensitivity (Streptomycin)</b> 15 µl of untransformed NEBExpress® Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Streptomycin will not form colonies after incubation for 16 hours at 37°C.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Tetracycline)</b> 15 µl of untransformed NEBExpress® 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.</p>	<b>Pass</b>
<p><b>Phage Resistance (φ 80)</b> 15 µl of untransformed NEBExpress® 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.</p>	<b>Pass</b>
<p><b>Transformation Efficiency</b> 50 µl of NEBExpress® 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.</p>	<b>Pass</b>

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



Lixin An  
Production Scientist  
23 Mar 2024



Anna Sorensen  
Packaging Quality Control Inspector  
30 May 2024