

## New England Biolabs Certificate of Analysis

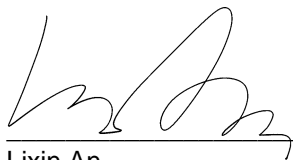
**Product Name:** BL21(DE3) Competent *E. coli*  
**Catalog Number:** C25271  
**Lot Number:** 10034317  
**Expiration Date:** 01/2020  
**Storage Temperature:** -80°C  
**Specification Version:** PS-C2527H/I v1.0

BL21(DE3) Competent <i>E. coli</i> Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10032414	Pass
C2527IVIAL	BL21(DE3) Competent <i>E. coli</i>	10027654	Pass
B9020SVIAL	SOC Outgrowth Medium	10025234	Pass

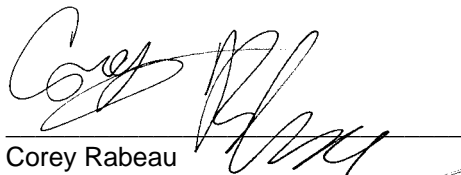
Assay Name/Specification	Lot # 10034317
<b>Phage Resistance (<math>\phi</math> 80)</b> 15 $\mu$ l of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate does not support plaque formation by phage $\phi$ 80 after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Transformation Efficiency</b> 50 $\mu$ l of BL21(DE3) Competent <i>E. coli</i> 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 $>1 \times 10^7$ cfu/ $\mu$ g of DNA.	<b>Pass</b>
<b>Antibiotic Sensitivity (Ampicillin)</b> 15 $\mu$ l of untransformed BL21(DE3) Competent <i>E. coli</i> 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 $\mu$ l of untransformed BL21(DE3) Competent <i>E. coli</i> 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 $\mu$ l of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>

Assay Name/Specification	Lot # 10034317
<p><b>Antibiotic Sensitivity (Spectinomycin)</b> 15 µl of untransformed BL21(DE3) Competent E. coli streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Streptomycin)</b> 15 µl of untransformed BL21(DE3) Competent E. coli 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 BL21(DE3) Competent E. coli streaked onto a Rich Broth plate containing Tetracycline 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  
06 Dec 2018



Corey Rabeau  
Packaging Quality Control Inspector  
11 Jan 2019