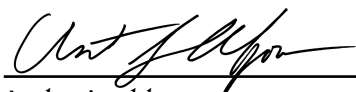


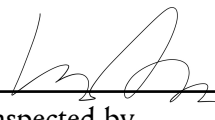
## New England Biolabs Certificate of Analysis

Product Name: BL21(DE3) Competent *E. coli*  
 Catalog #: C2527H/1  
 Lot #: 1031712  
 Assay Date: 12/2017  
 Expiration Date: 12/2018  
 Storage Temp: -80°C  
 Specification Version: PS-C2527H/1 v1.0  
 Effective Date: 01 Dec 2017

Assay Name/Specification (minimum release criteria)	Lot #1031712
<b>Antibiotic Sensitivity (Ampicillin)</b> - 15 µl 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 µl 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 µl 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>
<b>Antibiotic Sensitivity (Spectinomycin)</b> - 15 µl of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Streptomycin)</b> - 15 µl of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate containing Streptomycin will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Tetracycline)</b> - 15 µl of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Phage Resistance (Φ 80)</b> - 15 µl of untransformed BL21(DE3) Competent <i>E. coli</i> streaked onto a Rich Broth plate does not support plaque formation by phage Φ 80 after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Transformation Efficiency</b> - 50 µl 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 x 10 <sup>7</sup> cfu/µg of DNA.	<b>Pass</b>



Authorized by  
Tony Spear-Alfonso  
01 Dec 2017



Inspected by  
Lixin An  
13 Dec 2017

