

## New England Biolabs Certificate of Analysis

Product Name: *Lemo21(DE3) Competent E. coli*  
 Catalog Number: C2528J  
 Lot Number: 10053708  
 Expiration Date: 07/2020  
 Storage Temperature: -80°C  
 Specification Version: PS-C2528H v1.0

| Lemo21(DE3) Competent E. coli Component List |                               |            |                      |
|--|-------------------------------|------------|----------------------|
| NEB Part Number                              | Component Description         | Lot Number | Individual QC Result |
| N3041AVIAL                                   | pUC19 Vector                  | 10047676   | Pass                 |
| C2528JVIAL                                   | Lemo21(DE3) Competent E. coli | 10048110   | Pass                 |
| B9030AVIAL                                   | L-rhamnose solution           | 10033831   | Pass                 |

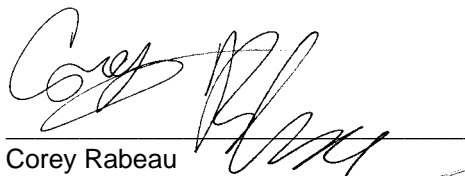
| Assay Name/Specification   | Lot # 10053708 |
|--|----------------|
| <p><b>Phage Resistance (<math>\phi</math> 80)</b><br/>           15 <math>\mu</math>l of untransformed Lemo21(DE3) Competent E. coli streaked onto a Rich Broth plate does not support plaque formation by phage <math>\phi</math> 80 after incubation for 16 hours at 37°C.</p>   | Pass           |
| <p><b>Transformation Efficiency</b><br/>           50 <math>\mu</math>l of Lemo21(DE3) Competent E. coli 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 10^7</math> cfu/<math>\mu</math>g of DNA.</p> | Pass           |
| <p><b>Antibiotic Resistance (Chloramphenicol)</b><br/>           15 <math>\mu</math>l of untransformed Lemo21(DE3) Competent E. coli streaked onto a Rich Broth plate containing Chloramphenicol will form colonies after incubation for 16 hours at 37°C.</p>   | Pass           |
| <p><b>Antibiotic Sensitivity (Ampicillin)</b><br/>           15 <math>\mu</math>l of untransformed Lemo21(DE3) Competent E. coli streaked onto a Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C.</p>  | Pass           |
| <p><b>Antibiotic Sensitivity (Kanamycin)</b><br/>           15 <math>\mu</math>l of untransformed Lemo21(DE3) Competent E. coli streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at</p>  | Pass           |

| Assay Name/Specification   | Lot # 10053708 |
|--|----------------|
| <p>37°C.</p> <p><b>Antibiotic Sensitivity (Spectinomycin)</b><br/>15 µl of untransformed Lemo21(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><br/>15 µl of untransformed Lemo21(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><br/>15 µl of untransformed Lemo21(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  
02 Jul 2019



Corey Rabeau  
Packaging Quality Control Inspector  
19 Aug 2019