

## New England Biolabs Certificate of Analysis

Product Name: NEB® 10-beta Electrocompetent *E. coli*  
 Catalog Number: C3020S  
 Packaging Lot Number: 10118882  
 Expiration Date: 08/2022  
 Storage Temperature: -80°C  
 Specification Version: PS-C3020S v1.0

| NEB® 10-beta Electrocompetent <i>E. coli</i> Component List |  |            |                      |
|---|--|------------|----------------------|
| NEB Part Number   | Component Description                        | Lot Number | Individual QC Result |
| N3041AVIAL  | pUC19 Vector                                 | 10109274   | Pass                 |
| C3020SVIAL  | NEB® 10-beta Electrocompetent <i>E. coli</i> | 10096643   | Pass                 |
| B9035SVIAL  | NEB® 10-beta/Stable Outgrowth Medium         | 10099264   | Pass                 |

| Assay Name/Specification  | Lot # 10118882 |
|---|----------------|
| <p><b>Antibiotic Sensitivity (Ampicillin)</b><br/>           15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C.</p>   | Pass           |
| <p><b>Antibiotic Sensitivity (Chloramphenicol)</b><br/>           15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Chloramphenicol will not form colonies after incubation for 16 hours at 37°C.</p>                                       | Pass           |
| <p><b>Antibiotic Sensitivity (Kanamycin)</b><br/>           15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.</p>   | Pass           |
| <p><b>Transformation Efficiency</b><br/>           25 µl of NEB® 10-beta Electrocompetent <i>E. coli</i> cells were transformed with 10 pg of pUC19 DNA using the transformation protocol provided. Incubation overnight on LB-Ampicillin plates at 37°C resulted in &gt;2 x 10<sup>10</sup> cfu/µg of DNA.</p> | Pass           |
| <p><b>Phage Resistance (φ 80)</b><br/>           15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a Rich Broth plate does not support plaque formation by phage φ 80 after incubation for 16</p>   | Pass           |

| Assay Name/Specification  | Lot # 10118882 |
|---|----------------|
| <p>hours at 37°C.</p> <p><b>Antibiotic Sensitivity (Tetracycline)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.</p> | <b>Pass</b>    |
| <p><b>Blue-White Screening (α-complementation, Competent Cells)</b><br/>NEB® 10-beta Electrocompetent E. coli were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</p>                                      | <b>Pass</b>    |
| <p><b>Antibiotic Resistance (Streptomycin)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Streptomycin will form colonies after incubation for 16 hours at 37°C.</p>                            | <b>Pass</b>    |
| <p><b>Antibiotic Sensitivity (Spectinomycin)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli streaked onto a LB or 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 (Nitrofurantoin)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Nitrofurantoin 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.

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.



Quijing Ren  
Production Scientist  
17 Aug 2021



Nick Privitera  
Packaging Quality Control Inspector  
17 Aug 2021