

## New England Biolabs Certificate of Analysis

Product Name: *NEB® 10-beta Electrocompetent E.coli*  
 Catalog Number: C3020K  
 Lot Number: 10056800  
 Expiration Date: 09/2020  
 Storage Temperature: -80°C  
 Specification Version: PS-C3020K v1.0

| NEB® 10-beta Electrocompetent E.coli Component List |                                      |            |                      |
|---|--------------------------------------|------------|----------------------|
| NEB Part Number                                     | Component Description                | Lot Number | Individual QC Result |
| N3041AVIAL  | pUC19 Vector                         | 10053503   | Pass                 |
| C3020KVIAL  | NEB® 10-beta Electrocompetent E.coli | 10054808   | Pass                 |
| B9035SVIAL  | NEB® 10-beta/Stable Outgrowth Medium | 10048136   | Pass                 |

| Assay Name/Specification   | Lot # 10056800 |
|--|----------------|
| <p><b>Transformation Efficiency</b><br/>           25 µl of NEB® 10-beta Electrocompetent E. coli 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>Antibiotic Sensitivity (Chloramphenicol)</b><br/>           15 µl of untransformed NEB® 10-beta Electrocompetent E. coli 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 E. coli 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>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>   | Pass           |
| <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</p>   | Pass           |

| Assay Name/Specification   | Lot # 10056800 |
|--|----------------|
| <p>for 16 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>Phage Resistance (φ 80)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli 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>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 (Ampicillin)</b><br/>15 µl of untransformed NEB® 10-beta Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Ampicillin 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.



Derek Robinson  
Production Scientist  
13 Sep 2019



Nick Privitera  
Packaging Quality Control Inspector  
01 Oct 2019