

## New England Biolabs Certificate of Analysis

**Product Name:** NEB® 10-beta Electrocompetent *E.coli*  
**Catalog Number:** C3020K  
**Packaging Lot Number:** 10076055  
**Expiration Date:** 04/2021  
**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                                | 10066466   | Pass                 |
| C3020KVIAL  | NEB® 10-beta Electrocompetent <i>E.coli</i> | 10070433   | Pass                 |
| B9035SVIAL  | NEB® 10-beta/Stable Outgrowth Medium        | 10062552   | Pass                 |

| Assay Name/Specification   | Lot # 10076055 |
|--|----------------|
| <b>Antibiotic Resistance (Streptomycin)</b><br>15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Streptomycin will form colonies after incubation for 16 hours at 37°C.            | Pass           |
| <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.           | Pass           |
| <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. | Pass           |
| <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.             | Pass           |
| <b>Antibiotic Sensitivity (Nitrofurantoin)</b><br>15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Nitrofurantoin will not form colonies after incubation                         | Pass           |

| Assay Name/Specification  | Lot # 10076055 |
|---|----------------|
| for 16 hours at 37°C.   |                |
| <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 (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>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 10e10 cfu/µg of DNA.</p> | <b>Pass</b>    |

This product has been tested and shown to be in compliance with all specifications.



Giuting Ren  
Production Scientist  
22 May 2020



Nick Privitera  
Packaging Quality Control Inspector  
22 May 2020