

## New England Biolabs Certificate of Analysis

Product Name: NEB® 10-beta Electrocompetent *E.coli*  
 Catalog Number: C3020K  
 Packaging Lot Number: 10105828  
 Expiration Date: 04/2022  
 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	10103254	Pass
C3020KVIAL	NEB® 10-beta Electrocompetent <i>E.coli</i>	10105028	Pass
B9035SVIAL	NEB® 10-beta/Stable Outgrowth Medium	10093599	Pass

Assay Name/Specification	Lot # 10105828
<p><b>Transformation Efficiency</b>            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>            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 hours at 37°C.</p>	Pass
<p><b>Blue-White Screening (α-complementation, Competent Cells)</b>            NEB® 10-beta Electrocompetent <i>E. coli</i> were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</p>	Pass
<p><b>Antibiotic Sensitivity (Nitrofurantoin)</b>            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 for 16 hours at 37°C.</p>	Pass
<p><b>Antibiotic Sensitivity (Spectinomycin)</b>            15 µl of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass

Assay Name/Specification	Lot # 10105828
<p><b>Antibiotic Sensitivity (Tetracycline)</b> 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>Antibiotic Sensitivity (Chloramphenicol)</b> 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>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Kanamycin)</b> 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>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Ampicillin)</b> 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>
<p><b>Antibiotic Resistance (Streptomycin)</b> 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>

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

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Quijing Ren  
Production Scientist  
05 Apr 2021



Nick Privitera  
Packaging Quality Control Inspector  
05 Apr 2021