

## New England Biolabs Certificate of Analysis

**Product Name:** NEB® 10-beta Electrocompetent *E. coli*  
**Catalog Number:** C3020S  
**Packaging Lot Number:** 10104339  
**Expiration Date:** 03/2022  
**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	10095954	Pass
C3020SVIAL	NEB® 10-beta Electrocompetent <i>E. coli</i>	10096643	Pass
B9035SVIAL	NEB® 10-beta/Stable Outgrowth Medium	10088512	Pass

Assay Name/Specification	Lot # 10104339
<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.	Pass
<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.	Pass
<b>Antibiotic Sensitivity (Kanamycin)</b> 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 (Ampicillin)</b> 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> 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	Pass

Assay Name/Specification	Lot # 10104339
for 16 hours at 37°C.	
<p><b>Blue-White Screening (<math>\alpha</math>-complementation, Competent Cells)</b> NEB® 10-beta Electrocompetent E. coli were shown to be suitable for blue/white screening by <math>\alpha</math>-complementation of the <math>\beta</math>-galactosidase gene using pUC19.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Tetracycline)</b> 15 <math>\mu</math>l 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>Transformation Efficiency</b> 25 <math>\mu</math>l 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 <math>&gt;2 \times 10^{10}</math> cfu/<math>\mu</math>g of DNA.</p>	<b>Pass</b>
<p><b>Antibiotic Resistance (Streptomycin)</b> 15 <math>\mu</math>l 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>Phage Resistance (<math>\phi</math> 80)</b> 15 <math>\mu</math>l of untransformed NEB® 10-beta Electrocompetent 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>	<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  
19 Mar 2021



Nick Privitera  
Packaging Quality Control Inspector  
19 Mar 2021