

## New England Biolabs Certificate of Analysis

**Product Name:** NEB® 10-beta Electrocompetent *E. coli*  
**Catalog Number:** C3020S  
**Packaging Lot Number:** 10142464  
**Expiration Date:** 05/2023  
**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	10135407	Pass
C3020SVIAL	NEB® 10-beta Electrocompetent <i>E. coli</i>	10133606	Pass
B9035SVIAL	NEB® 10-beta/Stable Outgrowth Medium	10125556	Pass

Assay Name/Specification	Lot # 10142464
<b>Phage Resistance (<math>\phi</math> 80)</b> 15 $\mu$ l of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a Rich Broth plate does not support plaque formation by phage $\phi$ 80 after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Transformation Efficiency</b> 25 $\mu$ l 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 $>2 \times 10^{10}$ cfu/ $\mu$ g of DNA.	<b>Pass</b>
<b>Blue-White Screening (<math>\alpha</math>-complementation, Competent Cells)</b> NEB® 10-beta Electrocompetent <i>E. coli</i> were shown to be suitable for blue/white screening by $\alpha$ -complementation of the $\beta$ -galactosidase gene using pUC19.	<b>Pass</b>
<b>Antibiotic Sensitivity (Tetracycline)</b> 15 $\mu$ l of untransformed NEB® 10-beta Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.	<b>Pass</b>
<b>Antibiotic Sensitivity (Spectinomycin)</b> 15 $\mu$ l 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.	<b>Pass</b>

Assay Name/Specification	Lot # 10142464
<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 (Nitrofurantoin)</b> 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>
<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>
<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 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>

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

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