

## New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Electrocompetent *E.coli*  
 Catalog Number: C2989K  
 Lot Number: 10056410  
 Expiration Date: 08/2020  
 Storage Temperature: -80°C  
 Specification Version: PS-C2989K v1.0

NEB® 5-alpha Electrocompetent E.coli Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10047676	Pass
C2989KVIAL	NEB® 5-alpha Electrocompetent <i>E.coli</i>	10054039	Pass
B9020SVIAL	SOC Outgrowth Medium	10048116	Pass

Assay Name/Specification	Lot # 10056410
<b>Antibiotic Sensitivity (Chloramphenicol)</b> 15 µl of untransformed NEB® 5-alpha 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> 15 µl of untransformed NEB® 5-alpha 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> 15 µl of untransformed NEB® 5-alpha 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 (Spectinomycin)</b> 15 µl of untransformed NEB® 5-alpha 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 (Streptomycin)</b> 15 µl of untransformed NEB® 5-alpha Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Streptomycin will not form colonies after incubation for	Pass

Assay Name/Specification	Lot # 10056410
16 hours at 37°C.	
<p><b>Antibiotic Sensitivity (Tetracycline)</b> 15 µl of untransformed NEB® 5-alpha 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> NEB® 5-alpha 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> 15 µl of untransformed NEB® 5-alpha 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> 25 µl of NEB® 5-alpha 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;1 x 10<sup>10</sup> cfu/µg of DNA.</p>	<b>Pass</b>
<p><b>Antibiotic Sensitivity (Ampicillin)</b> 15 µl of untransformed NEB® 5-alpha 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.



Quieting Ren  
Production Scientist  
30 Sep 2019



Nick Privitera  
Packaging Quality Control Inspector  
30 Sep 2019