

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Electrocompetent *E.coli*
 Catalog Number: C2989K
 Lot Number: 10044804
 Expiration Date: 04/2020
 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	10035844	Pass
C2989KVIAL	NEB® 5-alpha Electrocompetent <i>E.coli</i>	10038963	Pass
B9020SVIAL	SOC Outgrowth Medium	10032901	Pass

Assay Name/Specification	Lot # 10044804
Antibiotic Sensitivity (Nitrofurantoin) 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
Antibiotic Sensitivity (Spectinomycin) 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
Antibiotic Sensitivity (Streptomycin) 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 16 hours at 37°C.	Pass
Antibiotic Sensitivity (Tetracycline) 15 µl of untransformed NEB® 5-alpha 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.	Pass
Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha Electrocompetent <i>E. coli</i> were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.	Pass

Assay Name/Specification	Lot # 10044804
<p>Phage Resistance (ϕ 80) 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>	Pass
<p>Transformation Efficiency 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 $>1 \times 10^{10}$ cfu/μg of DNA.</p>	Pass
<p>Antibiotic Sensitivity (Ampicillin) 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>	Pass
<p>Antibiotic Sensitivity (Chloramphenicol) 15 μl of untransformed NEB® 5-alpha 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>	Pass
<p>Antibiotic Sensitivity (Kanamycin) 15 μl of untransformed NEB® 5-alpha 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>	Pass

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



Derek Robinson
Production Scientist
08 Mar 2019



Nick Privitera
Packaging Quality Control Inspector
10 May 2019