

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Competent *E. coli* (High Efficiency)
 Catalog Number: C2987U
 Lot Number: 10044809
 Expiration Date: 04/2020
 Storage Temperature: -80°C
 Specification Version: PS-C2987U v2.0

NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10035844	Pass
C2987UVIAL	NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency)	10035479	Pass
B9020SVIAL	SOC Outgrowth Medium	10032908	Pass

Assay Name/Specification	Lot # 10044809
<p>Transformation Efficiency 1 well of NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) cells were transformed with 100 pg of pUC19 DNA using the transformation protocol provided. Incubation overnight on LB-Ampicillin plates at 37°C resulted in >1 x 10e9 cfu/μg of DNA.</p>	Pass
<p>Phage Resistance (φ 80) 15 μl of untransformed NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) 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>Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</p>	Pass
<p>Antibiotic Sensitivity (Tetracycline) 15 μl of untransformed NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.</p>	Pass
<p>Antibiotic Sensitivity (Streptomycin) 15 μl of untransformed NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Streptomycin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass

Assay Name/Specification	Lot # 10044809
<p>Antibiotic Sensitivity (Ampicillin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a 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 Competent E. coli (High Efficiency) streaked onto a 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 Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass
<p>Antibiotic Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Nitrofurantoin will not form colonies after incubation for 16 hours at 37°C.</p>	Pass
<p>Antibiotic Sensitivity (Spectinomycin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Spectinomycin 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.



Lixin An
Production Scientist
08 Feb 2019



Nick Privitera
Packaging Quality Control Inspector
10 May 2019