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## New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Competent E. coli (High Efficiency)

Catalog Number: C2987U
Packaging Lot Number: 10096760
Expiration Date: 12/2021
Storage Temperature: -80°C

Specification Version: PS-C2987U v2.0

NEB® 5-alpha Competent E. coli (High Efficiency) Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
N3041AVIAL	pUC19 Vector	10088620	Pass	
C2987UVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10090081	Pass	
B9020SVIAL	SOC Outgrowth Medium	10082658	Pass	

Assay Name/Specification	Lot # 10096760
Antibiotic Sensitivity (Streptomycin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a 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 Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.	Pass
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.	Pass
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.	Pass
Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha Competent E. coli (High Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.	Pass



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Assay Name/Specification	Lot # 10096760 Pass
Phage Resistance (φ 80) 15 μl of untransformed NEB® 5-alpha Competent E. coli (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.	
Transformation Efficiency  1 well of NEB® 5-alpha Competent E. coli (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.	Pass
Antibiotic Sensitivity (Kanamycin) I5 µI of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation or 16 hours at 37°C.	Pass
Antibiotic Sensitivity (Chloramphenicol)  5 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.	Pass
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 ncubation for 16 hours at 37°C.	Pass

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

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Lixin An

Production Scientist

22 Jan 2021

Corey Rabeau

Packaging Quality Control Inspector

22 Jan 2021



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