

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha F Iq Competent *E. coli* (High Efficiency)
Catalog Number: C2992I
Lot Number: 10016260
Expiration Date: 07/2019
Storage Temperature: -80°C
Specification Version: PS-C2992H/I v1.0

NEB® 5-alpha F Iq Competent <i>E. coli</i> (High Efficiency) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10010689	Pass
C2992IVIAL	NEB® 5-alpha F Iq Competent <i>E. coli</i> (High Efficiency)	10009084	Pass
B9020SVIAL	SOC Outgrowth Medium	5681804	Pass

Assay Name/Specification	Lot # 10016260
Antibiotic Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha F'Iq Competent <i>E. coli</i> (High Efficiency) streaked onto a 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 F'Iq Competent <i>E. coli</i> (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 (Streptomycin) 15 µl of untransformed NEB® 5-alpha F'Iq 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.	Pass
Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha F'Iq 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.	Pass
Phage Resistance (φ 80) 15 µl of untransformed NEB® 5-alpha F'Iq Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate does not support plaque formation by phage φ 80	Pass

Assay Name/Specification	Lot # 10016260
after incubation for 16 hours at 37°C.	
<p>Transformation Efficiency 50 µl of NEB® 5-alpha F'Iq 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.</p>	Pass
<p>Antibiotic Resistance (Tetracycline) 15 µl of untransformed NEB® 5-alpha F'Iq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will form colonies after incubation for 16 hours at 37°C.</p>	Pass
<p>Antibiotic Sensitivity (Ampicillin) 15 µl of untransformed NEB® 5-alpha F'Iq 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 F'Iq 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 F'Iq 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

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



Lixin An
Production Scientist
27 Jul 2018



Corey Rabeau
Packaging Quality Control Inspector
27 Jul 2018