

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha F Iq Competent *E. coli* (High Efficiency)
Catalog Number: C2992I
Packaging Lot Number: 10138679
Expiration Date: 01/2023
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	10129358	Pass
C2992IVIAL	NEB® 5-alpha F Iq Competent <i>E. coli</i> (High Efficiency)	10092181	Pass
B9020SVIAL	SOC Outgrowth Medium	10121877	Pass

Assay Name/Specification	Lot # 10138679
Phage Resistance (ϕ 80) 15 μ l 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 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
Transformation Efficiency 50 μ l of NEB® 5-alpha F'Iq 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 $>1 \times 10^9$ cfu/ μ g of DNA.	Pass
Antibiotic Sensitivity (Ampicillin) 15 μ l of untransformed NEB® 5-alpha F'Iq Competent <i>E. coli</i> (High Efficiency) streaked onto a Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C.	Pass
Antibiotic Resistance (Tetracycline) 15 μ l of untransformed NEB® 5-alpha F'Iq Competent <i>E. coli</i> (High Efficiency)	Pass

Assay Name/Specification	Lot # 10138679
<p>streaked onto a Rich Broth plate containing Tetracycline will form colonies after incubation for 16 hours at 37°C.</p>	
<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 (Streptomycin) 15 µl of untransformed NEB® 5-alpha F'Iq 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.</p>	Pass
<p>Antibiotic Sensitivity (Spectinomycin) 15 µl of untransformed NEB® 5-alpha F'Iq 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
<p>Antibiotic Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha F'Iq 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 (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.

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Production Scientist
25 Jan 2022



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25 Jan 2022