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## New England Biolabs Certificate of Analysis

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

Catalog Number: C2992I
Packaging Lot Number: 10060357
Expiration Date: 10/2020
Storage Temperature: -80°C

Specification Version: PS-C2992H/I v1.0

NEB® 5-alpha F Iq Competent E. coli (High Efficiency) Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
N3041AVIAL	pUC19 Vector	10058192	Pass	
C2992IVIAL	NEB® 5-alpha F Iq Competent E. coli (High Efficiency)	10047926	Pass	
B9020SVIAL	SOC Outgrowth Medium	10048129	Pass	

Assay Name/Specification	Lot # 10060357
Transformation Efficiency 50 µl of NEB® 5-alpha F'lq 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
Phage Resistance (φ 80) 15 μl of untransformed NEB® 5-alpha F'lq 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.	Pass
Blue-White Screening ( $\alpha$ -complementation, Competent Cells) NEB® 5-alpha F'lq Competent E. coli (High Efficiency) were shown to be suitable for blue/white screening by $\alpha$ -complementation of the $\beta$ -galactosidase gene using pUC19.	Pass
Antibiotic Sensitivity (Spectinomycin) 15 µl of untransformed NEB® 5-alpha F'lq 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 F'lq Competent E. coli (High Efficiency)	Pass



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Assay Name/Specification	Lot # 10060357
streaked onto a Rich Broth plate containing Nitrofurantoin will not form colonies after incubation for 16 hours at 37°C.	
Antibiotic Sensitivity (Streptomycin) 15 µl of untransformed NEB® 5-alpha F'lq 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 (Chloramphenicol) 15 µl of untransformed NEB® 5-alpha F'lq 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 (Kanamycin) 15 µl of untransformed NEB® 5-alpha F'lq 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.	Pass
Antibiotic Resistance (Tetracycline) 15 µl of untransformed NEB® 5-alpha F'lq Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containingTetracycline will form colonies after incubation for 16 hours at 37°C.	Pass
Antibiotic Sensitivity (Ampicillin)  15 µl of untransformed NEB® 5-alpha F'lq 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.	Pass

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

Lixin An

**Production Scientist** 

19 Jul 2019

Corey Rabeau

Packaging Quality Control Inspector

25 Nov 2019



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