NEW ENGLAND BioLabs Inc.
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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*
*Lot Number:* *10032814*
*Expiration Date:* *12/2019*
*Storage Temperature:* *-80°C*
*Specification Version:* *PS-C2992H/I v1.0*

| NEB® 5-alpha F Iq Competent E. coli (High Efficiency) Component List | | | |
|---|---|---|---|
| **NEB Part Number** | **Component Description** | **Lot Number** | **Individual QC Result** |
| N3041AVIAL | pUC19 Vector | 10025691 | **Pass** |
| C2992IVIAL | NEB® 5-alpha F Iq Competent E. coli (High Efficiency) | 10023484 | **Pass** |
| B9020SVIAL | SOC Outgrowth Medium | 10018463 | **Pass** |

| Assay Name/Specification | Lot # 10032814 |
|---|---|
| **Phage Resistance (ϕ 80)**<br>15 µl of untransformed NEB® 5-alpha F'Iq 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** |
| **Transformation Efficiency**<br>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. | **Pass** |
| **Antibiotic Sensitivity (Nitrofurantoin)**<br>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. | **Pass** |
| **Antibiotic Sensitivity (Spectinomycin)**<br>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. | **Pass** |
| **Antibiotic Sensitivity (Streptomycin)** | **Pass** |

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|---|---|
| 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. | |
| **Blue-White Screening (α-complementation, Competent Cells)**<br>NEB® 5-alpha F'Iq 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** |
| **Antibiotic Resistance (Tetracycline)**<br>15 µl of untransformed NEB® 5-alpha F'Iq 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)**<br>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. | **Pass** |
| **Antibiotic Sensitivity (Chloramphenicol)**<br>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. | **Pass** |
| **Antibiotic Sensitivity (Kanamycin)**<br>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. | **Pass** |

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

Lixin An
Production Scientist
05 Oct 2018

Corey Rabeau
Packaging Quality Control Inspector
19 Dec 2018