NEW ENGLAND BioLabs Inc.
be INSPIRED drive DISCOVERY stay GENUINE
240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
Fax 978-921-1350
www.neb.com
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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:* *10147348*
*Expiration Date:* *03/2023*
*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 | 10135407 | **Pass** |
| C2992IVIAL | NEB® 5-alpha F Iq Competent E. coli (High Efficiency) | 10135215 | **Pass** |
| B9020SVIAL | SOC Outgrowth Medium | 10135532 | **Pass** |

| Assay Name/Specification | Lot # 10147348 |
|---|---|
| **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** |
| **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) | **Pass** |

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|---|---|
| streaked onto a Rich Broth plate containing Ampicillin will not form colonies after incubation for 16 hours at 37°C. | |
| **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 (Streptomycin)**<br>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. | **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 (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 (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.

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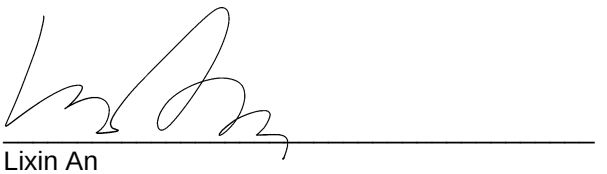
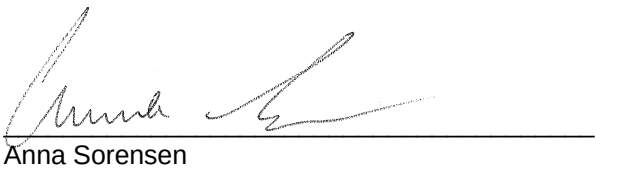


Lixin An
Production Scientist
31 Mar 2022



Anna Sorensen
Packaging Quality Control Inspector
31 Mar 2022