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New England Biolabs Certificate of Analysis

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

Catalog Number: C2987U
Packaging Lot Number: 10183459
Expiration Date: 02/2024
Storage Temperature: -80°C

Specification Version: PS-C2987U v2.0

| NEB® 5-alpha Competent E. coli (High Efficiency) Component List | | | | |
|---|--|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| N3041AVIAL | pUC19 Vector | 10176319 | Pass | |
| C2987UVIAL | NEB® 5-alpha Competent E. coli (High Efficiency) | 10175643 | Pass | |
| B9020SVIAL | SOC Outgrowth Medium | 10174251 | Pass | |

| Assay Name/Specification | Lot # 10183459 |
|--|----------------|
| Antibiotic Sensitivity (Ampicillin) 15 µl of untransformed NEB® 5-alpha 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) 15 µl of untransformed NEB® 5-alpha 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 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 Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha 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) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Spectinomycin will not form colonies after | Pass |



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| Assay Name/Specification | Lot # 10183459 |
|---|----------------|
| incubation for 16 hours at 37°C. | |
| Antibiotic Sensitivity (Streptomycin) 15 µl of untransformed NEB® 5-alpha 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 (Tetracycline) 15 µl of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after ncubation for 16 hours at 37°C. | Pass |
| Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha 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 |
| Phage Resistance (φ 80) I 5 μI of untransformed NEB® 5-alpha Competent E. coli (High Efficiency) streaked onto a Rich Broth plate does not support plaque formation by phage φ 80 after ncubation for 16 hours at 37°C. | Pass |
| Transformation Efficiency 1 well of NEB® 5-alpha 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 |

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Lixin An

Production Scientist

24 Feb 2023

Corey Rabeau

Packaging Quality Control Inspector

14 Mar 2023



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