

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Electrocompetent *E.coli*
 Catalog Number: C2989K
 Lot Number: 10047648
 Expiration Date: 06/2020
 Storage Temperature: -80°C
 Specification Version: PS-C2989K v1.0

| NEB® 5-alpha Electrocompetent E.coli Component List | | | |
|---|---|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| N3041AVIAL | pUC19 Vector | 10043515 | Pass |
| C2989KVIAL | NEB® 5-alpha Electrocompetent <i>E.coli</i> | 10040855 | Pass |
| B9020SVIAL | SOC Outgrowth Medium | 10040226 | Pass |

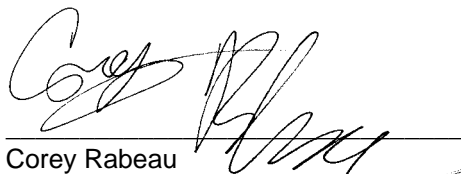
| Assay Name/Specification | Lot # 10047648 |
|--|----------------|
| Antibiotic Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Nitrofurantoin will not form colonies after incubation for 16 hours at 37°C. | Pass |
| Antibiotic Sensitivity (Spectinomycin) 15 µl of untransformed NEB® 5-alpha Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Spectinomycin will not form colonies after incubation for 16 hours at 37°C. | Pass |
| Antibiotic Sensitivity (Streptomycin) 15 µl of untransformed NEB® 5-alpha Electrocompetent <i>E. coli</i> streaked onto a LB or 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 Electrocompetent <i>E. coli</i> streaked onto a LB or Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C. | Pass |
| Blue-White Screening (α-complementation, Competent Cells) NEB® 5-alpha Electrocompetent <i>E. coli</i> were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19. | Pass |

| Assay Name/Specification | Lot # 10047648 |
|--|----------------|
| <p>Phage Resistance (ϕ 80) 15 μl of untransformed NEB[®] 5-alpha Electrocompetent E. coli streaked onto a Rich Broth plate does not support plaque formation by phage ϕ 80 after incubation for 16 hours at 37°C.</p> | Pass |
| <p>Transformation Efficiency 25 μl of NEB[®] 5-alpha Electrocompetent E. coli cells were transformed with 10 pg of pUC19 DNA using the transformation protocol provided. Incubation overnight on LB-Ampicillin plates at 37°C resulted in $>1 \times 10^{10}$ cfu/μg of DNA.</p> | Pass |
| <p>Antibiotic Sensitivity (Chloramphenicol) 15 μl of untransformed NEB[®] 5-alpha Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Chloramphenicol 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 Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.</p> | Pass |
| <p>Antibiotic Sensitivity (Ampicillin) 15 μl of untransformed NEB[®] 5-alpha Electrocompetent E. coli streaked onto a LB or Rich Broth plate containing Ampicillin 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.



Derek Robinson
Production Scientist
25 Mar 2019



Corey Rabeau
Packaging Quality Control Inspector
11 Jun 2019