

New England Biolabs Certificate of Analysis

Product Name: NEB® 5-alpha Competent *E. coli* (Subcloning Efficiency)
Catalog #: C2988J
Lot #: 0421610
Assay Date: 10/2016
Expiration Date: 10/2017
Storage Temp: -80°C
Specification Version: PS-C2988J v1.0
Effective Date: 07 Jul 2016

Assay Name/Specification (minimum release criteria)	Lot #0421610
Antibiotic Sensitivity (Ampicillin) - 15 µl of untransformed NEB® 5-alpha Competent <i>E. coli</i> (Subcloning 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 <i>E. coli</i> (Subcloning 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 <i>E. coli</i> (Subcloning 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 <i>E. coli</i> (Subcloning 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 <i>E. coli</i> (Subcloning 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) - 15 µl of untransformed NEB® 5-alpha Competent <i>E. coli</i> (Subcloning 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 <i>E. coli</i> (Subcloning Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.	Pass



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<p>Blue-White Screening (α-complementation, Competent Cells) - NEB[®] 5-alpha Competent <i>E. coli</i> (Subcloning Efficiency) were shown to be suitable for blue/white screening by α-complementation of the β-galactosidase gene using pUC19.</p>	Pass
<p>Phage Resistance (Φ 80) - 15 μl of untransformed NEB[®] 5-alpha Competent <i>E. coli</i> (Subcloning Efficiency) 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 - 50 μl of NEB[®] 5-alpha Competent <i>E. coli</i> (Subcloning 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 $>1 \times 10^6$ cfu/μg of DNA.</p>	Pass



Authorized by
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07 Jul 2016



Inspected by
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03 Oct 2016

