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## New England Biolabs Certificate of Analysis

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

Catalog Number: C2988J
Packaging Lot Number: 10172953
Expiration Date: 10/2023
Storage Temperature: -80°C

Specification Version: PS-C2988J v1.0

NEB® 5-alpha Competent E. coli (Subcloning Efficiency) Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
C2988JVIAL	NEB® 5-alpha Competent E. coli (Subcloning Efficiency)	10145023	Pass	

Assay Name/Specification	Lot # 10172953
Transformation Efficiency 50 μl of NEB® 5-alpha Competent E. coli (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 x 10e6 cfu/μg of DNA.	Pass
Phage Resistance (φ 80) 15 μl of untransformed NEB® 5-alpha Competent E. coli (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.	Pass
Blue-White Screening ( $\alpha$ -complementation, Competent Cells) NEB® 5-alpha Competent E. coli (Subcloning Efficiency) were shown to be suitable for blue/white screening by $\alpha$ -complementation of the $\beta$ -galactosidase gene using pUC19.	Pass
Antibiotic Sensitivity (Nitrofurantoin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (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 (Kanamycin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (Subcloning Efficiency) streaked onto a Rich Broth plate containing Kanamycin will not form colonies after incubation for 16 hours at 37°C.	Pass



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Assay Name/Specification	Lot # 10172953
Antibiotic Sensitivity (Spectinomycin) 15 µl of untransformed NEB® 5-alpha Competent E. coli (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 E. coli (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 E. coli (Subcloning Efficiency) streaked onto a Rich Broth plate containing Tetracycline will not form colonies after incubation for 16 hours at 37°C.	Pass
Antibiotic Sensitivity (Ampicillin)  15 µl of untransformed NEB® 5-alpha Competent E. coli (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 E. coli (Subcloning Efficiency) streaked onto a Rich Broth plate containing Chloramphenicol 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.

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.

Chris Blanchette Production Scientist 22 Apr 2022 Corey Rabeau

Packaging Quality Control Inspector

30 Nov 2022



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