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New England Biolabs Certificate of Analysis

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

Catalog Number: C2987I
Packaging Lot Number: 10069521
Expiration Date: 01/2021
Storage Temperature: -80°C

Specification Version: PS-C2987H/I v1.0

NEB® 5-alpha Competent E. coli (High Efficiency) Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
N3041AVIAL	pUC19 Vector	10064269	Pass	
C2987IVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10062960	Pass	
B9020SVIAL	SOC Outgrowth Medium	10062380	Pass	

Assay Name/Specification	Lot # 10069521
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 # 10069521
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 incubation 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) 15 μl 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 incubation for 16 hours at 37°C.	Pass
Transformation Efficiency 50 μl 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.

Lixin An

Production Scientist

03 Jan 2020

Nick Privitera

Packaging Quality Control Inspector

03 Mar 2020



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