

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	NEB® 5-alpha Competent E. coli (High Efficiency)
Catalog Number:	C2987/
Packaging Lot Number:	10241288
Expiration Date:	03/2025
Storage Temperature:	-80°C
Specification Version:	PS-C2987H/I v1.0

NEB® 5-alpha Competent E. coli (High Efficiency) Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
N3041AVIAL	pUC19 Vector	10226553	Pass	
C2987IVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10206734	Pass	
B9020SVIAL	SOC Outgrowth Medium	10202706	Pass	

Assay Name/Specification	Lot # 10241288
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 (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	Pass





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Assay Name/Specification	Lot # 10241288
incubation for 16 hours at 37°C.	
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 incubation for 16 hours at 37°C.	Pass
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 ( $\alpha$ -complementation, Competent Cells) NEB® 5-alpha Competent E. coli (High Efficiency) were shown to be suitable for blue/white screening by $\alpha$ -complementation of the $\beta$ -galactosidase gene using pUC19.	Pass
<b>Phage Resistance (<math>\phi</math> 80)</b> 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 $\phi$ 80 after incubation for 16 hours at 37°C.	Pass
<b>Transformation Efficiency</b> 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.

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.





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Lixin An Production Scientist 15 Dec 2023

Corey Rabeau

Packaging Quality Control Inspector 30 Apr 2024

