ThermoFisher SCIENTIFIC

Certificate of Analysis

DH10B Competent Cells

Product No. EC0113
Lot No. 2121671
Date of Manufacture 12Jun2019
Expiration Date 03Jun2021

Transformation Efficiency

50 µl of competent cells are transformed with 10 pg of supercoiled pUC19 plasmid DNA (non-saturating conditions). Test transformations are performed on a minimum of 10 vials per lot. Transformed cultures are plated on LB plates containing 100 µg/ml ampicillin and incubated overnight at 37°C.

Average transformation efficiency must be greater than, or equal to, 1.0×10^9 cfu/µg pUC19.

Antibiotic Sensitivity

Cells must exhibit growth on LB medium plates.

Untransformed cells must show no growth on LB plates containing 100 µg/ml ampicillin, indicating the absence of any ampicillin resistance markers.

Untransformed cells must show no growth on LB plates containing 50 µg/ml kanamycin, indicating the absence of any kanamycin resistance markers.

Untransformed cells must show no growth on LB plates containing 15 µg/ml chloramphenicol, indicating the absence of any chloramphenicol resistance markers.

Untransformed cells must show no growth on LB plates containing 50 µg/ml Zeocin™, indicating the absence of any Zeocin™ resistance markers.

Untransformed cells must show no growth on LB plates containing 15 µg/ml tetracycline, indicating the absence of any tetracycline resistance markers.

Untransformed cells must exhibit growth on LB plates containing 100 µg/ml streptomycin, indicating the presence of streptomycin resistance markers.

Leu Phenotype

Cells must exhibit inhibited growth on 2B minimal medium plates and growth on 2B minimal plates supplemented with 30 µg/ml leucine after overnight incubation at 37°C, indicating a Leu^- phenotype.

Lac Phenotype

Untransformed cells must exhibit growth of white colonies on LB plates containing 400 µg/ml X-Gal and 1 mM IPTG, indicating a Lac^- phenotype.

Gal Phenotype

Cells must exhibit growth of white or light pink colonies on MacConkey galactose plates, indicating a Gal^- phenotype.

RecA Phenotype

Cells must exhibit inhibited growth on LB medium plates containing 8 µg/ml nitrofurantoin, indicating a RecA$^-$ phenotype.

Absence of Bacteriophage

To verify the absence of bacteriophage contamination, 0.2 ml of DH10B competent cells are added to LB top agar and poured over LB plates. After overnight incubation at 37°C, no plaques should be detected.

Results

Product meets all specifications.

For Research Use Only. Not for use in diagnostic procedures. If you have any further questions about this Certificate of Analysis, please contact Technical Services at 1-800-955-6288 (US and Canada) or 1-760-603-7200, x2 (all other countries).

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