

# Certificate of Analysis

## One Shot™ TOP10 Chemically Competent E. coli

Product No. C404010, 10368022

Lot No. 3037331

Date of Manufacture 17-Sep-2024

Expiration Date 23-Aug-2026

---

### 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 3 vials per lot. Transformed cultures are plated on LB plates containing 100 µg/ml ampicillin and incubated overnight at 37°C.

Transformation efficiency must be greater than  $1.0 \times 10^9$  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 tetracycline, indicating the absence of any tetracycline 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 growth of no more than 5 colonies on LB plates containing 100 µg/ml spectinomycin, indicating the absence of any spectinomycin resistance markers and a low rate of spontaneous mutation.

Untransformed cells must exhibit growth on LB plates containing 25 µg/ml streptomycin, indicating the presence of streptomycin resistance markers.

## Absence of Bacteriophage

To verify the absence of phage contamination, 0.5-1.0 ml of TOP10 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.

This product is covered by U.S. Patent No. 4,981,797 and foreign equivalents.

---

For Research Use Only. Not for use in diagnostic procedures.

Thermo Fisher Scientific  
Life Sciences Solutions  
5781 Van Allen Way  
Carlsbad, CA, USA 92008  
<https://www.thermofisher.com>  
For inquiries, contact us at [cofarequests@thermofisher.com](mailto:cofarequests@thermofisher.com)



Chevohn Joseph  
Director, Quality  
Issued on 18-Sep-2024