

# **Certificate of Analysis**

# One Shot™ TOP10 Chemically Competent E. coli

	Product No.	C404003, 10666493	
		Lot No.	3032401B
	Date of Manufacture Expiration Date		22-Oct-2024
			23-Aug-2026

### Transformation Efficiency

50  $\mu$ l 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  $\mu$ g/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  $\mu$ g/ml tetracycline, indicating the absence of any tetracycline resistance markers.

Untransformed cells must show no growth on LB plates containing 15  $\mu$ g/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  $\mu$ g/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 inguiries, contact us at cofareguests@thermofisher.com

Chevohn Joseph Director, Quality Issued on 22-Oct-2024