

# Certificate of Analysis

## One Shot® Stbl3™ Chemically Competent E. coli

Product No. C737303, 10193952

Lot No. 2944675A

Date of Manufacture 11-Oct-2024

Expiration Date 06-Sep-2026

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### 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  $1.0 \times 10^8$  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 and Pro Phenotypes

Cells must exhibit growth on 2B minimal medium plates supplemented with 30 µg/ml leucine and 30 µg/ml proline after overnight growth at 37°C. Cells should show inhibited growth on 2B minimal medium plates, 2B

minimal plates supplemented only with leucine, or 2B plates supplemented only with proline under the same incubation conditions. This indicates both Leu<sup>-</sup> and Pro<sup>-</sup> phenotypes.

### **Gal Phenotype**

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

### **RecA Phenotype**

Cells must exhibit inhibited growth on LB plates containing 8 µg/ml nitrofurantoin, indicating a RecA<sup>-</sup> phenotype.

### **Absence of Bacteriophage**

To verify the absence of phage contamination, 0.5-1.0 ml of Stbl3™ 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.

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