

# **Certificate of Analysis**

# TOP10 Electrocomp<sup>™</sup> Cells

Product No. C404	052, 10082692
Lot No	. 2852526
Date of Manufacture	12-Feb-2024
Expiration Date	11-Sep-2025

# Transformation Efficiency

 $20\mu$ l of electrocompetent cells are transformed with 10 pg of supercoiled pUC 19 plasmid DNA. Test transformations are performed on 10 to 40 vials per lot, depending on batch size. Transformed cultures are plated on LB plates containing 100 µg/ml ampicillin and incubated overnight.

Transformation efficiency must be greater than 1.0 x 10<sup>9</sup> cfu/µg pUC19.

### RecA-Phenotype

Inhibited growth in presence of nitrofurantoin (8 µg/ml), indicating the absence of RecA-.

### Antibiotic Sensitivity

No growth on plates containing ampicillin (100  $\mu$ g/ml), indicating the absence of any plasmid-encoded ampicillin resistance genes.

No growth on plates containing kanamycin (50  $\mu$ g/ml), indicating the absence of any plasmid-encoded kanamycin resistance.

No growth on plates containing tetracycline (15  $\mu$ g/ml), indicating the absence of any plasmid-encoded tetracycline resistance genes.

No growth on plates containing Zeocin<sup>™</sup> (50 µg/ml), indicating the absence of any plasmid-encoded Zeocin<sup>™</sup> resistance genes.

No growth on plates containing chloramphenicol (15 µg/ml), indicating the absence of any plasmid-encoded chloramphenicol resistance genes.

### Marker Identification

Exhibits growth on plates containing streptomycin (100  $\mu$ g/ml), indicating the presence of streptomycin-resistance marker.

# **Auxotrophic Markers**

Inhibited growth on 2B plates and growth on 2B leu plates, indicating the presence of auxotrophic markers for leucine.

# Lac-Phenotype

Exhibits growth of white colonies on X-gal IPTG plates, indicating a Lac-phenotype.

## Gal-Phenotype

Exhibits growth of white colonies on MacConkey galactose plates, indicating a Gal-phenotype.

# Sterility

To verify the absence of bacteriophage contamination, 0.5-1.0 ml of TOP10 Electrocomp<sup>™</sup> cells are added to LB top agar and poured over LB plates. After overnight incubation, no plaques should be detected.

# **Overall Results**

Product meets all specifications.

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

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Chevohn Joseph Director, Quality Issued on 13-Feb-2024