*Trans*1-T1 Phage Resistent Chemically Competent Cell

Cat. No. CD501
Storage: at -70°C for six months

Description

*Trans*1-T1 Phage Resistant Chemically Competent Cell is specifically designed for chemical transformation of DNA. It permits a transformation efficiency of over 10^9 cfu/μg DNA (tested by pUC19 plasmid DNA).

Genotype

F$^-$φ80(*lacZ*)ΔM15Δ*lac*X74*hsd*R(r_k^-, m_k^+)Δ*rec*A1398*end*A1*ton*A

Features

- High transformation efficiency: >10^9 cfu/μg (pUC19 DNA).
- Fast-growing, doubling time about 50 minutes and colonies are visible in 8~9 hours.
- Resistance to T1 and T5 phage.
- Blue/white selection.

Procedures

- Thaw a vial of 100 μl *Trans*1-T1 Chemically Competent Cell on ice, aliquot 50 μl of the cells into a prechilled 1.5 ml tube, add target DNA into the tube and mix gently. Incubate the cells on ice for 30 minutes.
- Heat-shock the cells for 30 seconds at 42°C, and then quickly remove the tube from the 42°C water bath and place them on ice for 2 minutes. Do not shake the tube during this procedure.
- Add 500 μl of sterile SOC medium or LB medium (no antibiotic) into the tube, mix well and shake at 37°C for 1 hour at 200 rpm to resuscitate cells.
- According to the experiment requirement (plasmid, transformation of recombinant ligation product), add different volumes of transformed cells into corresponding antibiotic-containing LB medium. Spread the transformed cells on selective plate. Invert the plate and incubate at 37°C overnight.

Notes

- High efficiency transformation can be achieved by transforming cells immediately following thawing.
- Avoid repeated thawing.
- Avoid pipetting cells.
- Gentle handling is required for the entire procedure.

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