

## Blue Chemically Competent Cell (TetR)

Catalogue No.: abx098068

Blue Chemically Competent Cell is designed for chemical transformation of DNA. This cell is resistant to tetracycline (Tet<sup>R</sup>) and allows blue/white selection with a transformation efficiency of over 10<sup>8</sup> cfu/μg DNA (tested by pUC19 plasmid DNA).

The genotype is: *recA1 endA1 gyrA96 thi-1 hsdR17 supE44* (*r<sub>k</sub><sup>-</sup>, m<sub>k</sub><sup>+</sup>*), *relA1 lac* [F' *proAB lacI*<sup>q</sup>ΔM15: Tn10 (Tet<sup>R</sup>)].

The 1 ml size consists of 10 × 100 μl Competent Cells, 20 μl (0.1 ng/μl) Control Plasmid pUC19, and 10 ml SOC Medium.

**Target:** Blue Chemically Competent Cell (TetR)

**Storage:** Store at -70 °C for up to 6 months. Do not store in liquid nitrogen. Avoid repeated freeze/thaw cycles.

**Note:** THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.  
This product is shipped with dry ice.

**Directions for use:**

**Recommended Protocol:**

1. Equilibrate a water bath to 42 °C. Bring a vial of SOC medium or LB medium to room temperature. Warm selective plates to 37 °C for 30 minutes.
2. Thaw 100 μl of Blue Chemically Competent Cell on ice. Aliquot 50 μl of cells into a pre-chilled 1.5 ml tube, then add target DNA (1-5 μl). Do not mix by pipetting up and down. Leave on ice for 30 minutes.
3. Heat-shock the cells for 45 seconds at 42 °C, without shaking. Immediately transfer to the tube to ice. Leave on ice for 2 minutes without shaking.
4. Add 500 μl of prewarmed SOC medium or LB medium (without antibiotics) into the tube. Mix well and shake at 37 °C for 1 hour at 200 RPM for cell recovery and expression of antibiotic resistance.
5. Spread 20-200 μl from each transformation vial onto a pre-warmed selective plate. Cells that have not been plated can be stored at 4 °C and plated the next day if required.
6. Invert the plates and incubate at 37 °C overnight.
7. Select colonies and analyse by restriction enzyme digestion, PCR or sequencing.

**Note:**

Higher efficiency transformation can be achieved by transforming cells immediately following thawing. Avoid repeated thawing. All samples and reagents require gentle handling throughout the entire procedure.