

# BL21 (DE3) Chemically Competent Cell

## Product description

BL21 (DE3) Chemically Competent Cell from YEASEN is a chemically transformed competent cell prepared on the basis of the Escherichia coli BL21 (DE3) strain, and is a high-efficiency protein expression host with T7 RNA polymerase as the expression system. It can simultaneously express T7 RNA polymerase and E. coli RNA polymerase for protein expression of pET series, pGEX, pMAL and other plasmids. The product is Suitable for recombinant expression of non-viral proteins. The conversion efficiency of more than  $10^7$  cfu/µg DNA was detected using pUC19. BL21 (DE3) competent cell genotypes: F<sup>-</sup>ompT hsdS<sub>B</sub> ( $r_B^-m_B^-$ ) gal dcm (DE3).

### Components

| Components No. | Name                                 | 11804ES80 |
|----------------|--------------------------------------|-----------|
| 11804          | BL21 (DE3) Chemically Competent Cell | 10×100 µL |

## Specifications

| Species                                     | Escherichia coil  |
|---|---|
| Cell type                                   | Chemical competent cell   |
| Whether methylated DNA can be cloned        | Yes   |
| Efficiency                                  | $>1 \times 10^{7}$  |
| Blue-white spot screening                   | No  |
| Bacterial or yeast strains                  | BL21 (DE3)  |
| Amplification of the ccdB-containing vector | It is not suitable for amplification of ccdB-containing vectors |

#### Storage

The product should be stored at -85~-65°C for six months. Do not store the product in -25~-15°C or liquid nitrogen.

#### Instructions

1. Take 100  $\mu$ L of competent cells, ice bath, thaw (approximately 5 min).

2. Add the DNA of interest to the thawed competent cell suspension immediately, gently flick well, and let stand in an ice bath for 30 min.

\*Do not add more than one-tenth of the volume of competent cell suspension.

3. Place the EP tube in a 42°C water bath for 90 sec, then quickly transfer to ice and let stand for 2-3 min.

\*Do not shake during this process, otherwise it will reduce the conversion efficiency.

4. Add about 900  $\mu$ L of antibiotic-free LB or SOC medium to the centrifuge tube, mix well and recover at 37°C at 200 rpm for 45 min.

5. Collect the bacteria by centrifugation at 5,000 rpm for 1 min, leave about 100  $\mu$ L of supernatant coating onto a plate containing the corresponding antibiotic, and incubate at 37°C overnight.



## Notes

1. This product should not be freeze-thawed repeatedly, so as not to reduce the conversion efficiency of the competent cells.

- 2. The thawing time of this product on ice should not be too long.
- 3. The plasmid should be mixed gently.
- 4. For your safety and health, please wear lab coats and disposable gloves for operation.
- 5. This product is for research use ONLY!