Ver. HB221031

# DH5α Chemically Competent Cell

#### **Product description**

DH5 $\alpha$  Chemically Competent Cell from YEASEN is a competeny cell obtained by a special process of DH5 $\alpha$  strain. It can be used for the chemical transformation of DNA with the conversion efficiency up to  $10^8$  cfu/ $\mu$ g plasmid DNA. It is widely used for efficient DNA cloning and plasmid amplification, and can ensure stable inheritance of high-copy plasmids. At the same time, it can be used to construt clones, blue-white spot screening. Deletion of *rec*A1 and *end*A1 genes in DH5 $\alpha$  cells ensured the stability of cloned DNA.

DH5 $\alpha$  competent cell genotypes: F-  $\phi$ 80 *lac* Z $\Delta$ M15  $\Delta$ (*lac*ZYA-*arg* F) U169 *end*A1 *rec*A1 *hsd*R17(*rk*-,*mk*+) *sup*E44 $\lambda$ - *thi*-1 *gyr*A96 *rel*A1 *pho*A

#### Components

Components No.	Name	11802ES80	11802ES92
11802-A	DH5α Chemically Competent Cell	10×100 μL	100×100μL
11802-B	pUC19 (control vector,10 pg/μL)	10 μL	10 μL

#### **Specifications**

Species	Escherichia coil	
Cell type	Chemical competent cell	
Whether it contains an F'episome	No	
Efficiency	>1×10^8	
Blue/white colony screening	Yes	
Bacterial or yeast strains	DH5α	
Amplification of the ccdB-containing vector	It is not suitable for amplification of ccdB-containing vectors	

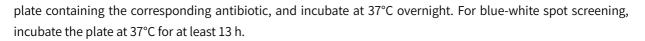
## **Shipping and Storage**

The product is shipped with dry ice and can be stored at -85°C~-65°C for six months. Do not store the product in -20°C or liquid nitrogen.

#### Instructions

- 1. Take 100 μL 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 25 min.
  - [Note]: 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 45 sec, then quickly transfer to ice and let stand for 2 min.
  - [Note]: Do not shake during this process, otherwise it will reduce the conversion efficiency.
- 4. Add about 700  $\mu$ L of antibiotic-free LB or 2YT medium to the centrifuge tube, mix well and recover at 37 °C at 200 rpm for 60 min.
- 5. Collect the bacteria by centrifugation at 5000 rpm for 1 min, leave about 100 μL of supernatant coating onto a





### Notes

- 1. Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety.
- 2. For research use only.