Ver. HB221031

DH5α Chemically Competent Cell

Product description

DH5α Chemically Competent Cell from YEASEN is a competeny cell obtained by a special process of DH5α strain. It can be used for the chemical transformation of DNA with the conversion efficiency up to 10^8 cfu/μg 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 DH5α cells ensured the stability of cloned DNA.

DH5α competent cell genotypes: F- ϕ80 *lac* ZΔM15 Δ(*lac*ZYA-*arg* F) U169 *end*A1 *rec*A1 *hsd*R17(*rk*-,*mk*+) *sup*E44λ- *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 μL 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

plate containing the corresponding antibiotic, and incubate at 37°C overnight. For blue-white spot screening, incubate the plate at 37°C for at least 13 h.

Notes

1.Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety.

2. For research use only.