ECOS[™]Sonic Competent Cells

I. Description 5/20 vials Store at -80°C

ECOS[™] competent cells is the fast transformation competent cells developed by Yeastern Biotech technology. Without additional gene modification, the process takes less than 6 minutes to yield the high efficiency without the need of SOC recovery (with ampicillin).

ECOS[™] Sonic competent cells is the derivative of BL21(DE3) strain. It inherits the protein expression and fast-growing feature from its parent strain. The further deletion of endA and recA improve the quality of plasmid DNA and enable the plasmid extraction in 3-6 hours growing.

T&A Expression Kit (FYC201-10P) is recommended for ECOS™ Sonic; it combines the primary cloning of PCR product, and the subcloning for protein expression make the experiment easier and faster.

II. Genotype

 $F^{-}ompT hsdS_{B}(r_{B}^{-}m_{B}^{-})$ gal dcm (DE3) Δ endA Δ recA

III. Efficiency $\geq 1*10^8$ cfu/ug



The concentration of plasmid purification will be largest after 3~6 hours incubation.





IV. Transformation Procedure

We suggest you follow the 6-minute transformation protocol.

Important Note:	
Ampicillin (Ap)	20 µg/ml
Kanamycin (Km)	25 µg/ml
Tetracycline (Tc)	25 μg/ml
Chloramphenicol (Cm)	20 µg/ml

- 1. The recommended concentration is based on freshly prepared antibiotics.
- 2. The use of expired antibiotics will result in insufficient medicinal properties and it is easy to produce pseudo-transformed colonies.
- 3. If an excessive concentration of antibiotics is used or a combination of multiple antibiotics is used for screening, the efficiency of the transformation will be significantly reduced.



1. Circulating water bath or running tap water until ~1/2 competent cells thawing.



2. Incubate on ice and add prechilled plasmids. (please do not add over 5% the volume of competent cells.)





4. Incubate on ice for 5 minutes.



5. Heat shock at 42°C for 30 seconds

6. Plating on 4°C or RT, dry plate. And Incubation at 37°C





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