ProClone™ Competent Cells

Cat. No. E003
Store at -80°C.

Product Component	Quantity	Cat. No.
ProClone™ Competent Cells	6 x 200 µl	E003

Description
ProClone™ Competent Cells are high-efficiency, chemically competent *E. coli* DH5a cells that are optimized for use with **abm**'s versatile range of expression vectors. Reduced recombination and high efficiency make ProClone™ Competent Cells the choice for both routine and challenging plasmid amplification and subcloning projects.

Key Features
- Transformation efficiency: >1 x 10^6 CFU/µg of DNA
- Results in high quality plasmid preparations *(endA1)*
- Resistant to T1 phage *(fhuA2)*
- Exhibits reduced recombination rate *(recA1)*
- Blue/White screening capable

Protocol
The following protocol serves as a general guideline and may require optimization.

1. Thaw a vial of cells on ice for 10 min. Gently flick tube to thoroughly mix any settled cells. Aliquot 60 µl of cells per transformation into sterile 1.5ml tubes.
   Note: once thawed, cells should not be re-frozen as transformation efficiency will be compromised.

2. Add 0.01-100 ng of plasmid DNA or 10-20 µl of subcloning reaction (i.e. ligation) to the cells and mix gently by flicking the tube 4-5 times. Do not vortex. Incubate reaction at 4°C for 30 min.

3. Heat shock the cells by placing the tube into a 42°C water bath for 45 s. Remove tubes immediately and place on ice for 1-2 min.

4. Add 150 µl of room temperature SOC media to the mixture. Incubate tubes at 37°C with vigorous shaking (250 rpm) for 1 h.

5. Prepare several dilutions of the mixture and spread 50-100 µl of each dilution onto appropriate antibiotic selection plates. Incubate at 37°C overnight.