



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: $>1 \times 10^6$ 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.