

Talk tidbits

TransforMax™ EC100™ *E. Coli* Competent Cells

High Efficiency Electrocompetent & Chemically Competent *E. Coli*

The highly versatile TransforMax™ EC100™ *E. coli* competent cells are ideal for most cloning applications. The cells provide very high transformation efficiency when tested against a wide range of different sized supercoiled DNAs as well as DNA directly from a ligation reaction (see Table 1).

Benefits

- High transformation efficiency with clones of all sizes - including BAC clones (Table 1).
- *Lac* ΔM15 for blue/white screening of recombinants.
- Restriction minus (*mcrA*, Δ(*mrr-hsdRMS-mcrBC*)) enables efficient cloning of methylated DNA.
- Endonuclease minus (*endA1*) to ensure high yields of DNA.
- Recombination minus (*recA1*) for greater stability of large cloned inserts.

Genotype

F - *mcrA* Δ(*mrr-hsdRMS-mcrBC*)
 φ80*dlac*ΔM15 Δ*lacX74* *recA1* *endA1*
araD139 Δ(*ara, leu*)7697 *galU* *gaK* λ- *rpsL*
nupG

TransforMax™ EC100™ <i>E. coli</i> Transformation Efficiencies with Different DNAs		
DNA	TransforMax™ EC100™ Chemically Competent <i>E. coli</i>	TransforMax™ EC100™ Electrocompetent <i>E. coli</i>
pUC19	2.5 X 10 ⁸	1.4 X 10 ¹⁰
8.1 kb Clone	1.3 X 10 ⁷	Not tested
13.1 kb Clone	4.3 X 10 ⁶	1.3 X 10 ⁹
23.1 kb Clone	9.2 X 10 ⁵	3.0 X 10 ⁸
145 kb BAC Clone	Not tested	7 X 10 ⁷
13.1 kb Clone directly from a ligation reaction	2.2 X 10 ⁵	2.1 X 10 ⁷

Table 1. Comparison of the transformation efficiencies of TransforMax™ EC100™ *E. coli* with a variety of DNAs. Transformations were performed using 50 µl of competent cells and either supercoiled DNAs of the indicated sizes or a 1 µl aliquot from a standard 10 µl ligation reaction. Results shown are in cfu/µg of DNA and are the average transformation efficiencies obtained from several trials.

TransforMax™ EC100™ Electrocompetent *E. coli*

- Transformation efficiency of >1 x 10¹⁰ cfu/µg of pUC19.

TransforMax™ EC100™ Chemically Competent *E. coli*

- Transformation efficiency of >1 x 10⁸ cfu/µg of pUC19.
- Supplied in convenient single-use 50 µl aliquots.

TransforMax™ EC100™ Electrocompetent *E. coli*

EC10005 5 X 100 µl
 EC10010 10 X 100 µl

Includes pUC19 control DNA.

TransforMax™ EC100™ Chemically Competent *E. coli*

CC02810 10 X 50 µl

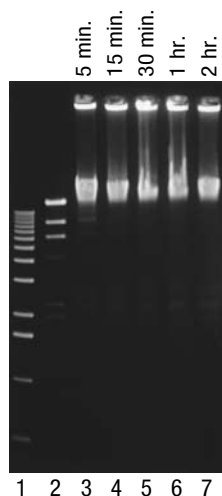
Includes pUC19 control DNA.

Phage T1-resistant TransforMax™ EC100™ Competent cells are also available.

Please visit www.EpiBio.com for details.

Fast-Link™ DNA Ligation Kit

DNA Ligations in 5 Minutes!



EPICENTRE's Fast-Link™ DNA Ligation Kit is formulated to provide fast and efficient DNA ligations in as little as 5 minutes at room temperature for both routine and high-throughput cloning.

FIG 1. Time curve for cohesive-end ligation using Fast-Link™ Kit. Lambda *Hind* III markers were ligated using 2 units of Fast-Link DNA Ligase (Lanes 3–7). Lane 1, kb ladder; Lane 2, no enzyme.

Fast and Efficient DNA Ligations

- Ligate cohesive-end DNA in 5 minutes at room temperature.
- Ligate blunt-end DNA in 15 minutes at room temperature.
- Ligation of PCR product with A-overhangs in 1 hour or less at 16°C.
- Transform cells without desalting the ligation.

Fast-Link™ DNA Ligation Kit

LK11025 25 Ligations
 LK0750H 50 Ligations
 LK6201H 100 Ligations