

FailSafe™ PCR PreMix Selection Kit

FS99060 60 Units
Contains FailSafe™ PCR Enzyme Mix and the 12 FailSafe™ PCR 2X PreMixes.

FailSafe™ PCR System

FS99100 100 Units
Includes FailSafe™ PCR Enzyme Mix and choice of one FailSafe™ PCR 2X PreMix.

FS99250 250 Units
Includes FailSafe™ PCR Enzyme Mix and choice of two FailSafe™ PCR 2X PreMixes.

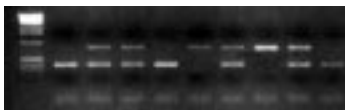
FS9901K 1,000 Units
Includes FailSafe™ PCR Enzyme Mix and choice of eight FailSafe™ PCR 2X PreMixes.

Never fail at PCR again.
We Promise.

“The FailSafe System worked beautifully! ... I’m responsible for providing PCR data trust-

worthy enough to make breeding decisions for each line. Our experiments require screening of the animals’ genotypes. We are now using the FailSafe System to screen two knockout lines (multiplex) and four transgenic (single PCR product) lines of mice. Soon we will be using the FailSafe PreMix Selection Kit again when we start working with a new line of knockout mice.”

— Jessica Otte,
Center of Neurovirology & Cancer Biology,
Temple University, Philadelphia, PA



PCR results obtained using the FailSafe™ PCR System to screen for mouse Knockout Gene P. PCR reactions with mouse genomic DNA and two forward primers with one shared reverse primer (0.1 µg each) were incubated for 30 cycles of 90°C for 15 sec., 55°C for 15 sec., and 72°C for 1 min., followed by 72°C for 10 minutes. (Data courtesy of Jessica Otte).



Obtain the Highest Transformation Efficiency Possible Using TransforMax™ EC100™ Electrocompetent *E. coli*

With a transformation efficiency of $>5 \times 10^9$ cfu/µg DNA (pUC19) EPICENTRE's new TransforMax™ EC100™ Electrocompetent *E. coli* have the highest transformation efficiency of any electrocompetent cells. And since TransforMax EC100 cells are restriction minus and lack transformation size bias against large clones, they are ideal for almost every cloning application. For example, use of TransforMax EC100 cells results in complete and unbiased BAC libraries, ensuring the presence of every clone in the library. Their high efficiency, lack of size bias and other features also make them ideal for generating EZ::TN Transposon insertion clones or deletion subclones from DNA cloned in the pWEB::TNC™ cosmid or pPDM™ plasmid deletion vectors.

Transformation Efficiency

$> 5 \times 10^9$ cfu/µg DNA (pUC19)

Genotype

F⁻ *mcrA* Δ(*mrr-hsdRMS-mcrBC*) ø80d*lacZ*ΔM15 Δ*lacX74* *recA1 endA1 araD139* Δ(*ara, leu*)7697 *galU galK λ- rpsL nupG*

Relevant Phenotype

- Blue/white screening of vectors expressing the LacZ' α-complementing peptide.
- Restriction minus for efficient cloning of methylated (e.g. mammalian genomic) DNA.
- Accepts large clones for complete and unbiased BAC library production.

- Endonuclease minus (*endA1*) to ensure high yields of plasmid clones.
- Recombination minus (*recA1*) to ensure the stability of large cloned inserts.

Table 1. The average transformation efficiency of eight independent transformations of TransforMax™ EC100™ Electrocompetent *E. coli* with pUC vector was 9.2×10^9 . All values are in cfu/µg DNA.

	Transformation efficiency
TransforMax EC100 <i>E. coli</i>	9.2×10^9
Competitor S	5×10^9
Competitor I	4×10^9
Competitor B	3×10^9

TransforMax™ EC100™ Electrocompetent *E. coli*

EC10005 5 X 100 µl (10 Electroporations)

EC10010 10 X 100 µl (20 Electroporations)

Each includes pUC19 control DNA. TransforMax cells are available in bulk. Please inquire.

www.epicentre.com/catalog/ec100.htm