

## 5 Minute Transformation Method

This is a shorter method of transforming E. coli. It works for both supercoiled DNA and ligations.

1. Place LB Amp plates into 37 degree C incubator to pre-warm.
2. Thaw competent cells on ice.
3. Add DNA (2uL for supercoiled; 2.5 lambda for ligations) to 50 uL of cells on ice for 5 minutes.
4. Plate all cells onto pre-warmed plates.
5. Place in incubator overnight.

**NOTES:** Four cell types have been tested comparing the heat shock method to the 5 minute method.

The following table is a summary of the results:

Cell Type	Number of Colonies			
	Ligation		Supercoiled	
	5 minute	Heat shock	5 minute	Heat shock
SURE	++++	+	++++	+
DH5alpha	++	+	+	++
TOPP 2	+++	+	++++	++++
W3110	+	++++	+	++++