

7/23/13

- Plasmid Prep: K081012 (Single Colonies 1,2,3)  
I721002 (Single Colonies 1,2,3)

~~\* these were mutagenic samples~~

- Streaked and made liquid cultures of:  
K174015 - Trans. 1 (1,2,3,4,5)  
- Trans. 2 (1,2,3,4,5)

\* these were mutagenic samples

- Prepared competent cells using DH5 $\alpha$

~~1) place 1ml of culture in 2ml tubes~~

~~2) spin 2 min~~

~~3) resuspend with pipet in 600  $\mu$~~

~~4)~~

1) Get pre-chilled MCF tubes from fridge

2) Prepare ice water bucket

3) Evenly transfer DH5 $\alpha$  cells into MCF tubes

4) Centrifuge for 10 min @ 6000 rpm  
- (use smaller clinical centrifuge tube)

5) Prepare bleach container and pour supernatant in

6) Add 400  $\mu$  of ice-cold CCMB80 buffer

- ~~resuspend~~<sup>mix</sup> using pipet until solution is consistent  
- do 5 cycles (plung in and out)

7) Add 400  $\mu$  of buffer and shake gently by inversion

8) Place in ice bucket for 20 min.

9) Centrifuge again for 10 min

10) Decant supernatant into bleach

11) Resuspend in 175  $\mu$  of buffer

12) Place in ice bucket for 20 min.

13) Label flasks and tubes

14) Continue with transformation

- Started transformations using DH5 $\alpha$  competent cells and K174015 (Kan, mutagenic), K824008 A (Chlor, mutagenic), K824008 B (Chlor, mutagenic), K824012 (Chlor, mutagenic)

- 1) place SOC medium (from fridge door) in incubator
- 2) also place 4 plates in the incubator (each with appropriate antibiotic resistance)
- 3) Get an ice water bath
- 4) Get 4 microcentrifuge tubes (MCF tubes) and a float
- 5) Add 50  $\mu$ l of competent cells
- 6) Add 2  $\mu$ l of DNA
- 7) Place in water bath for 2 min
- 8) while waiting
  - obtain 400 ml beaker, fill with hot water, adjust water to 42 $^{\circ}$ C (at least)
- 9) Place tubes in 42 $^{\circ}$  bath for 30 sec.
- 10) Another 2 min on ice
- 11) Add 1 ml of warm SOC medium (put SOC back in fridge)
- 12) Place each tube in incubator (37 $^{\circ}$ C) for 1 hour
- 13) Carefully label each plate
- 14) pour/spread appropriate tube onto each plate using the bar or disposable spreaders
- 15) place the plates back in the incubator overnight

Placed  
1:25 pm  
→  
Start  
here

Trans. 1	=	K174015
Trans. 2	=	K824008 A
Trans. 3	=	K824008 B
Trans. 4	=	K824012

- Began ligation of digest from 7/18 (Steven Notebook p. 36)
  - 1) - K174015 + Kan backbone
  - 2) - K824008 A + chlor
  - 3) - K824008 B + chlor
  - 4) - K824012 + chlor

1)

✓ Promoter/Construct	2λ
✓ Backbone	2λ
✓ 10x Buffer	2λ
Ligase	1λ
✓ d H <sub>2</sub> O	<u>13λ</u>
	20λ

- ~~2) Leave at room temp. for 10 min~~
  - ~~3) Put in hot water bath for 20 min. at 80°C~~
- ↑  
No, this is correct.