5/11/2015

1 2AB, 2BC, 2CA Ligation Test

1.1 BsaI digestion of 2AB, 2BC, 2CA

Used 5 ug of each DNA.

	2AB (112 ng/uL)	2BC (205 ng/uL)	2CA (218.7 ng/uL)
BsaI	4 uL	4 uL	4 uL
Template	$44.6~\mathrm{uL}$	$24.39~\mathrm{uL}$	$22.86~\mathrm{uL}$
Cutsmart	$5~\mathrm{uL}$	$5~\mathrm{uL}$	5 uL
ddH2O	0 uL	16.61 uL	18.14 uL
Total	$53.6~\mathrm{uL}$	$50~\mathrm{uL}$	$50~\mathrm{uL}$
50 C	2 hr		
65 C	20 min		

We are conducting ligation tests between all possible combinations using T4 and T7 ligase

2 NotI Concatemers

Sri suggested using NotI to digest the plasmids and create a super plasmid that contains multiple copies of the monomers.

Testing NotI digestion today using 2CA with the protocol below.

2CA (280 ng/uL)

 $\begin{array}{ccc} \text{NotI-HF} & 2 \text{ uL} \\ \text{DNA} & 7.2 \text{ uL} \\ \text{Cutsmart} & 5 \text{ uL} \\ \text{ddH2O} & 35.8 \text{ uL} \\ \textbf{Total} & \textbf{50 uL} \end{array}$

3 Results

Cast 200 mL of a 1.5% TAE agarose gel to visualize results of both BsaI and Not1 digestion.

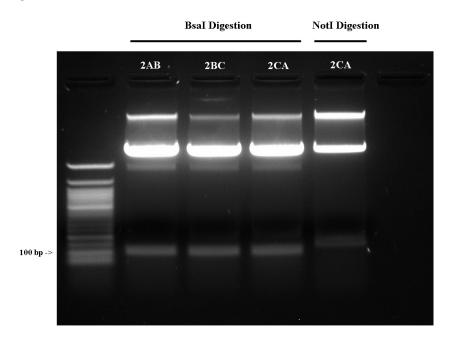


Figure 1: Digestion Results: The 100 bp bands were excised as well as the second band in the NotI digestion.