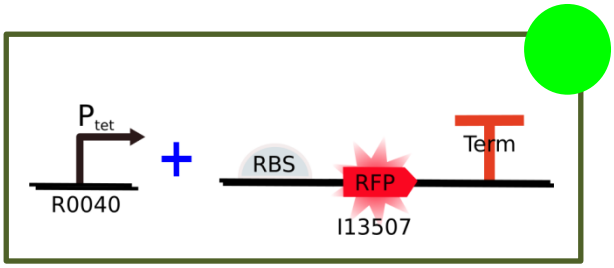
Assembly:

Pt_I13507



1st Day:

EXSP Digestion (see **Enzymatic Digestion Protocol**)

	Part	Size	ηg/µl
1	R0040	164 bp	78.3
2	I13507	861 bp	214

	Volume to 1,0 µg (µl)	Buffer 10x (µl)	BSA	Enzime 1	Volume (µl)	Enzime 2	Volume (µl)	H_2O to 20µl (µl)
1	13.5	2 (M)	-	S	1	P	1	2.5
2	4.5	2 (M)	-	X	1	P	1	11.5

Final Plasmid	Resistence
pSB1C3	chloramphenicol

Gel purification

- See PureLink® Quick Plasmide Miniprep Invitrogen™ manual
- Quantify digestion products

Parts	ηg/µl
R0040	8,6
I13507	9.8

Obs: 260/280 in a quality parameter that tells you if your sample is contaminated with proteins. The greater it is compared to 1 the less contaminants you have.

3rd Day:

Ligation (see **Ligation Protocol**)

Part containing the plasmid	R0040	6 µl
Insert	I13507	6 µl
10x T4 DNA Buffer	4 µl	
T4 DNA ligase 1u	0.5 µl	
H2O to 20µl	3.5	

Obs: To determinate the amount of DNA necessary we used the following equation

$$\textit{Insert ng} = \textit{plasmid ng} \times \textit{insert bp plasmid bp} \times \textit{insert: plasmid ratio}$$

- Incubate overnight at 37°C.
- Prepare and sterilize in the autoclave tubes with 6 ml of liquid LB medium.
- Prepare glycerol 40%

4th Day:

Transformation (see **Transformation Protocol in Escherichia coli DH5-α**)

- Organism: E. coli DH5-α
- Selection: Ampcillin

5th Day:

Confirmation with NotI