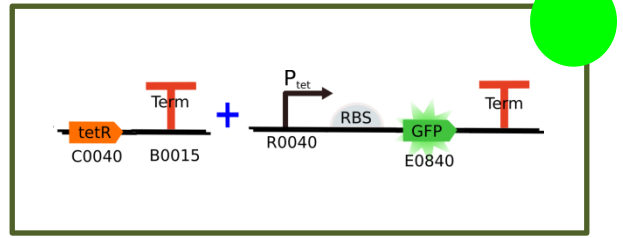


Assembly:

Tet_E0840



1st Day:

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

| | Part | Size | ng/ μ l |
|---|----------|--------|-------------|
| 1 | Tet_Term | 813 bp | 104.3 |
| 2 | Pt_E0840 | 932 bp | 265.0 |

| | Volume to 1,0 μ g (μ l) | Buffer 10x (μ l) | BSA (μ l) | Enzyme 1 | Volume (μ l) | Enzyme 2 | Volume (μ l) | H ₂ O to 20 μ l (μ l) |
|---|----------------------------------|-----------------------|----------------|----------|-------------------|----------|-------------------|---|
| 1 | 6.4 | 2 (M) | - | S | 1 | P | 1 | 9.6 |
| 2 | 12.2 | 2 (M) | 2 | X | 1 | P | 1 | 3.8 |

| Final Plasmid | Resistance |
|---------------|-----------------|
| pSB1C3 | chloramphenicol |

Gel purification

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

| Parts | ng/ μ l |
|----------|-------------|
| Tet_Term | 13.6 |
| Pt_E0840 | 9.9 |

Obs: 260/280 is 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.

Ligation (see **Ligation Protocol**)

| | | |
|-----------------------------|-----------------|-----|
| Part containing the plasmid | Tet_Term | 3.7 |
| Insert | Pt_E0840 | 5 |
| 10x T4 DNA Buffer | | 2 |
| T4 DNA ligase 1u | | 0.4 |
| H2O to 20µl | | 8.9 |

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

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

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

2nd Day:

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

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

4th Day:

Confirmation with NotI.