

## 2018.5.27

Today we get the kit from NPU for vector plasmid pSB1C3, pSB3C5 and pSB4C5. We resuspended them and test the plasmid concentration.

The concentration is shown below.

Vector	Concentration/ $\mu\text{g}\cdot\text{ml}^{-1}$
pSB1C3	30.44
pSB3C5	22.17
pSB4C5	6.28

## 2018.5.28

We transformed the plasmid into E. coli DH5 $\alpha$  and Add them to the selection plate.

## 2018.5.30

Choose monoclonal colony from the selection plate.

Cultivate them in LB medium, and incubated them overnight in 37°C, 220rpm.

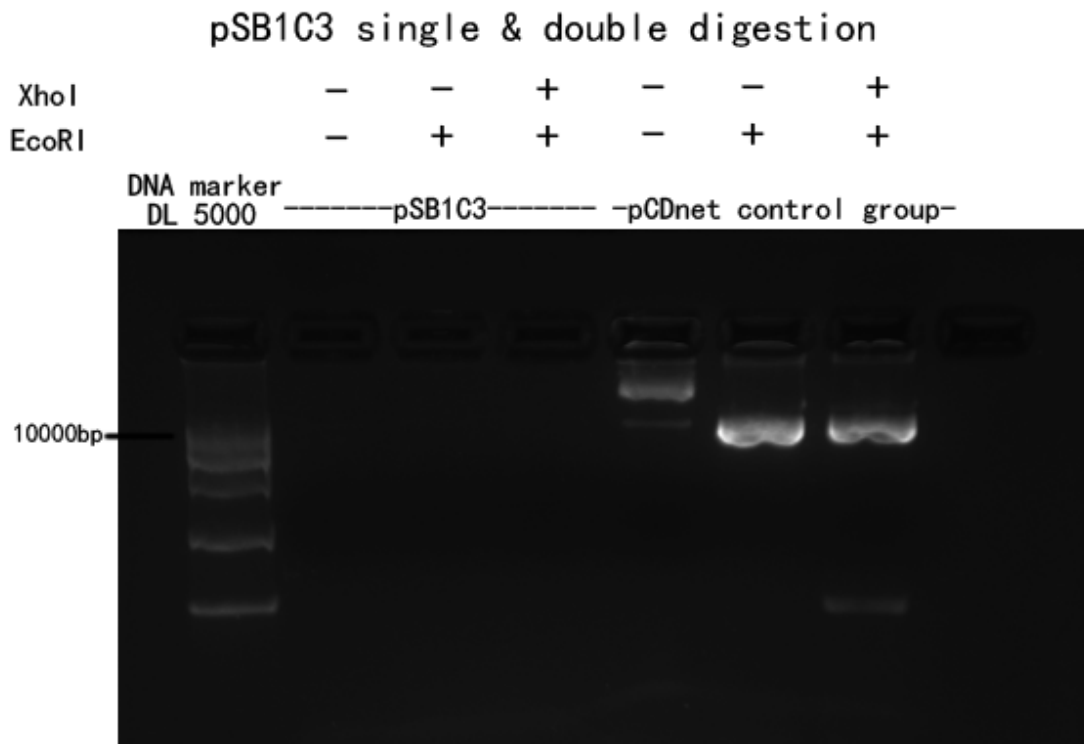
## 2018.5.31

Extract plasmid from bacteria. The concentration is shown below.

Vector	Concentration/ $\mu\text{g}\cdot\text{ml}^{-1}$
pSB1C3 ①	81.98
pSB3C5 ①	71.43
pSB3C5 ②	106.46
pSB3C5 ③	44.21
pSB4C5 ①	264.74
pSB4C5 ②	231.55

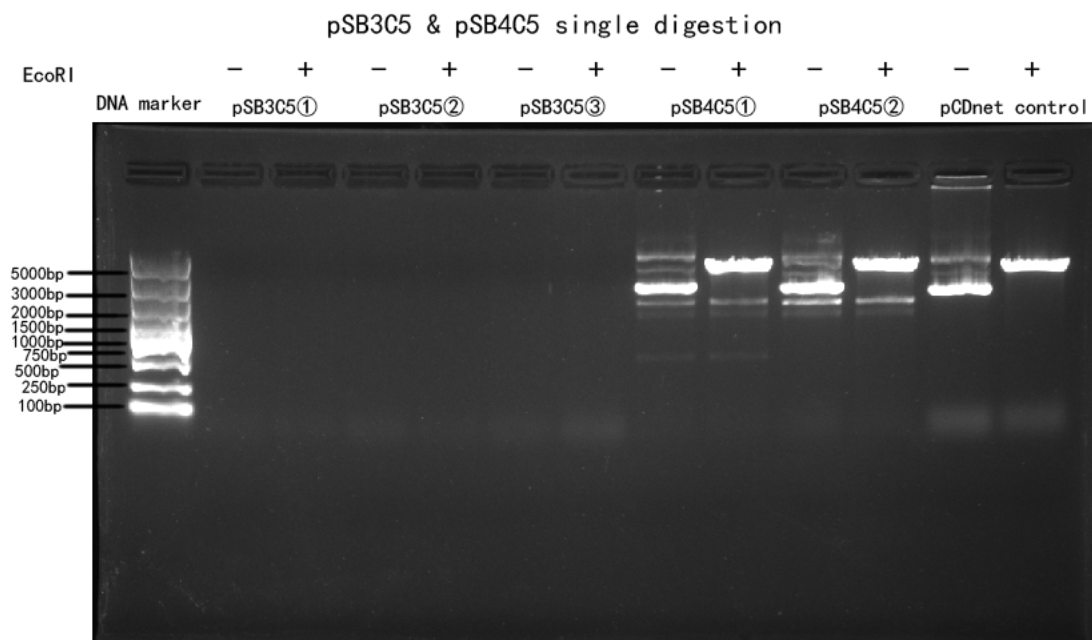
## 2018.6.1

We use XhoI and EcoRI to double digest the pSB1C3 plasmid. We choose pCDuet-1 as the control group. The result is shown below.



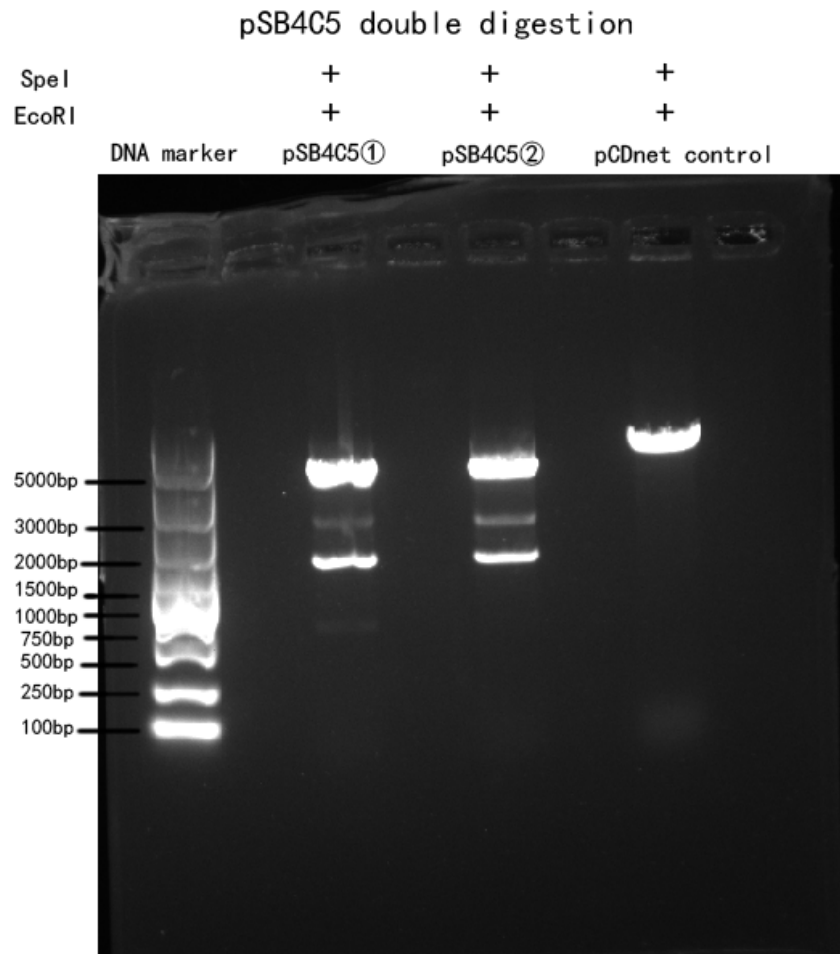
### 2018.6.3

We use EcoRI to digest the pSB3C5 & pSB4C5 plasmid. We choose pCDuet-1 as the control group. The result is shown below.



The pSB4C5 plasmid shows the right result.

Therefore, we then use SpeI and EcoRI to double digest the pSB1C3 plasmid. The result is shown below.



It shows that we have got one of the right vector plasmid.