

Digestion

Name:

Date:

Continue from

Date

Name

Experiment

Project Name:

Procedure

1. add H₂O (38μl-DNA)
2. 5 μl NEB4 buffer (stored at iGEM's, -20°C)
3. 5 μl 10x BSA (used 1:10 diluted sample stored at iGEM's, -20°C)
4. DNA (500 ng) (Vector:Insert ratio 1:3 in following Ligation)
5. 1 μl restriction enzymes (stored at iGEM's, -20°C)
6. heat for 1-2 hours 37°C (6 hours if time)
7. heat for 20 minutes 80°C (inactivation of enzymes)
8. keep at 4°C if you cannot continue

Measured DNA-concentration with Nanodrop to calculate the volume of DNA to do the digestion:

Sample Name

DNA concentration (μg/μl)

Restriction enzymes you need to cut the vector, insert1 and insert 2:

Components	Vector (μl)	Insert1 and 2 (μl)
DNA (500ng)		
BSA (10x) (5μl)		
NEB4 Buffer (5μl)		
Enzyme 1 (1μl)		
Enzyme 2 (1μl)		
H ₂ O (38 μl- DNA)		
In total 50 μl		

Documentation:

Why are you doing this experiment? Where are the samples stored?
Antibiotica resistance, vector used etc.

Run a gel to verify if the part is cut out.