Siphoviridae Phage Assembly TX/ TL

Introduction

This protocol is used to assembly phage in vitro method by iGEM Munich 2018 made cell extract

Materials

- Buffer B (iGEM Munich 2018)
- Cell Extract E (iGEM Munich 2018)
- GamS (iGEM Munich 2018)
- dNTPs (NEB) (iGEM Munich 2018)
- Phage DNA
- Nuclease-free H₂O

Procedure

• <u>Day 1</u>

<u>Assembly</u>

- 1. Keep the reagents on ice. Extract and Buffer must thaw on ice
- 2. Mix the reagents in the following order:

Concentration	Reagents
8.9 μl	Buffer B
3.3 μM	GamS
0.5 mM	dNTPs
Fill to 20 μl	Nf H ₂ O

7 1 11	Extract E

- 3. Incubate for 10 min on ice
- 4. Add 0.5 nM of Phage DNA
- 5. Incubate at 29°C for at least 5 hours (overnight possible)
- 6. Following: Measure the Phage titer

7. Prepare also the negative control: mix Buffer B, dNTPs, Extract E and fill it with water (do not add GamS and Phage DNA)