

## Ligation

### Material

T4 Ligase from New England Biolabs

10x T4 ligase buffer

DNA fragments

ddH<sub>2</sub>O

### Procedure

1. Calculate the amounts of insert DNA and vector.
2. Make up a master mix of everything in EP tubes and microcentrifuge it for 30-60s (10.0µL ligation system)

T4 Ligase	0.5µl
10x T4 ligase buffer	1.0µl
ddH <sub>2</sub> O	(8.5 - vector and insert volume) µl
6:1 molar ratio of insert to vector (~10ng vector)	
----- 10.0µL Total	

3. Incubate at 60°C for 1 hour or even longer.