

# Ligation

## Aim of the experiment

This protocol can be used to connect DNA fragments with fitting overhangs or blunt ends through the reaction with a Ligase enzyme. One of the two (or multiple) DNA fragments needs to be dephosphorylated prior to ligation.

## Materials

- Template DNA
- Quick Ligase
- Quick Ligase buffer
- ddH<sub>2</sub>O
- Heat Block

## Procedure

1. Mix the following reagents.

Concentration	Reagents
20fM	Insert Fragment
60fM	Backbone Fragment
2µl	Quick Ligase Buffer
1µl	Ligase
Fill to 20µl	ddH <sub>2</sub> O

2. Incubate the reaction mix for 1 hour at 37°C.
3. Heat to inactivate ligase at 65°C for 15 minutes.