# Self-Circularization of Linear DNA

## Introduction

This protocol is used to re-circularize linear plasmid DNA. Obtained from UNC Chapel Hill.

#### **Materials**

- Material
  - > 5 uL of 10x T4 DNA ligase buffer
  - > 10-50 ng of Linearized Plasmid DNA
  - > 5 uL T4 DNA Ligase
  - > \*NF water to final volume 50 uL

#### Procedure

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- 1. Mix components above -- Start with water, end with Ligase, the order of the other components does not matter
- 2. Vortex quickly to mix thouroughly
- 3. Incubate at RT for 2 hours
- 4. Heat inactivate Ligase at 65 C for 10 mins in thermocycler
- 5. Transfrom up to 5 uL of re-circularized DNA into competent cells using the transformation protocol