

LVL0 cloning using annealed Oligos

Daniel Stukenberg

Abstract

Citation: Daniel Stukenberg LVL0 cloning using annealed Oligos. **protocols.io**

dx.doi.org/10.17504/protocols.io.pthdnj6

Published: 27 Apr 2018

Protocol

Annealing of Oligos

Step 1.

Set up Annealing reaction in 1,5 mL microcentrifuge tube

| | |
|--------------------|----------------|
| fwd Oligo | 1,5 µL (10 µM) |
| rev Oligo | 1,5 µL (10 µM) |
| T4 ligase buffer | 5 µL (10x) |
| ddH ₂ O | 42 µL |

Incubate in heatblock for 10 min at 85°C

Turn off heatblock and allow samples to remain in the heatblock for slow cooling to room temperature.

Proceed with next step or freeze annealed oligos for long term storage.

Golden Gate Reaction

Step 2.

Set up Golden Gate Reaction

| | |
|--------------------|------------|
| Entry Vector | 50 - 70 ng |
| T7-Ligase (NEB) | 1 µL |
| BsmBI (NEB) | 1 µL |
| T4-Ligas Buffer | 1 µL |
| ddH ₂ O | Ad 10 µL |

Start Golden Gate Reaction in Thermocycler

| | | |
|--------------|------|--------|
| Digest | 42°C | 2 min |
| Ligation | 16°C | 5 min |
| Final Digest | 60°C | 30 min |
| Inactivation | 80°C | 19 min |

Transformation

Step 3.

Transform complete reaction mix into competent cells using a chosen protocol