

Ligation of PCR Product into Plasmid

Goal	To ligate desired PCR products into a plasmid
Materials	<ul style="list-style-type: none">• Restriction digested DNA of PCR product• Plasmid with compatible ends• T4 DNA ligase buffer• T4 DNA ligase• sterile water• 1.5 mL microfuge tubes• Vortex• Centrifuge• Pipettes
Procedure	<ol style="list-style-type: none">1. Thaw T4 DNA ligase buffer and vortex to mix2. Determine how much DNA of PCR product and DNA of plasmid needed to mix3. To the microfuge tube, add T4 DNA ligase buffer, PCR DNA, plasmid DNA, and sterile water4. Vortex and centrifuge the reaction5. Add T4 DNA ligase and pipet to mix6. Incubate reaction at room temperature for 1.5 hours or at 16°C overnight