

Restriction Digestion

Goal	To cut desired DNA down into smaller parts – can lead to DNA ligation
Materials	<ul style="list-style-type: none">• Desired DNA to digest• Sterile water• Restriction Enzyme buffer• Restriction Endonucleases• 1.5 mL microfuge tubes• Pipettes and tips• Heating blocks• Thermometers• Vortex• Centrifuge
Procedure	<ol style="list-style-type: none">1. Set a heat block to 37°C and one to 60-80°C.2. In a 1.5 microfuge tube, add appropriate restriction enzyme buffer, the desired DNA, and sterile water. Vortex and centrifuge after3. Pipet and mix in restriction endonuclease4. Place reaction tubes in first heat block for approximately one hour5. Remove reaction tubes and place in second heat block (if heat inactivation of enzymes is required) for 20 minutes6. Store the cut DNA at -20°C until needed for future use