

Restriction digest can cut DNA into fragments at specific recognition sites.

**Materials:**

DNA to be digested

NEB buffer 2

BSA

Digest Enzyme EcoRI

Digest Enzyme PstI

ddH<sub>2</sub>O

**Procedure:**

- 1、 Add 250ng of DNA to be digested, and adjust with ddH<sub>2</sub>O for a total volume of 16ul.
- 2、 Add 2.5ul of NEBuffer 2.
- 3、 Add 0.5ul of BSA.
- 4、 Add 0.5ul of EcoRI.
- 5、 Add 0.5ul of PstI.
- 6、 There should be a total volume of 20ul. Mix well and spin down briefly.
- 7、 Incubate the restriction digest at 37°C for 30min, and then 80C for 20min to heat kill the enzymes.
- 8、 Run a portion of the digest on a gel (8ul, 100ng), to check that both plasmid backbone and part length are accurate.