

Restriction Digest of DNA with XbaI

Introduction

This protocol allows us to linearize or perform restriction enzyme digestion using XbaI on our DNA of interest.

Reagents

- Monarch® Plasmid DNA Miniprep Kit
- DNA sample of interest
- New England Biolabs CutSmart buffer
- XbaI restriction enzyme
- Milli-Q H₂O

Equipment

- PCR tubes
- Incubation cabinet
- Pipette and tips

Procedure

- Using a New England Biolabs Monarch® Plasmid DNA Miniprep Kit, follow the manufacturer [protocol](#) to yield a sample of Miniprep DNA.
- Add the following amounts of reagents to a sterile PCR tube:

Reagent	Amount
Miniprep DNA	20 µL
XbaI restriction enzyme	1 µL
CutSmart buffer	2.5 µL
Milli-Q H ₂ O	1.5 µL

- Once all the reagents have been mixed in a tube, incubate the sample at 37°C for 15 minutes to perform restriction digestion on the miniprep DNA.