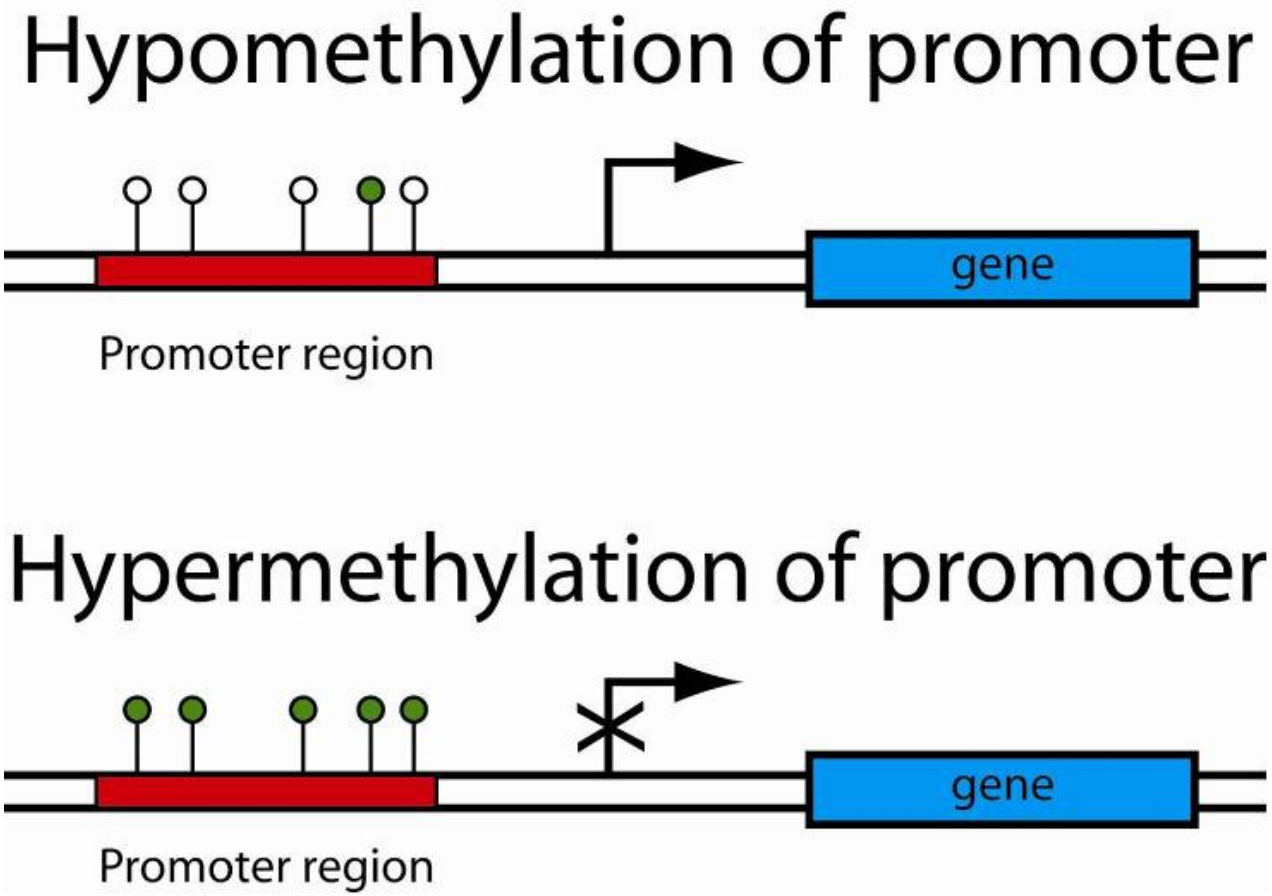
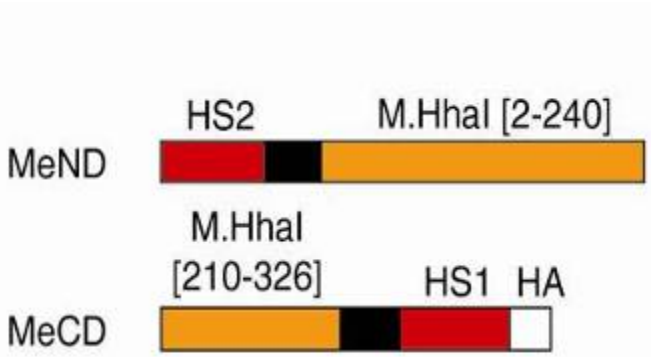
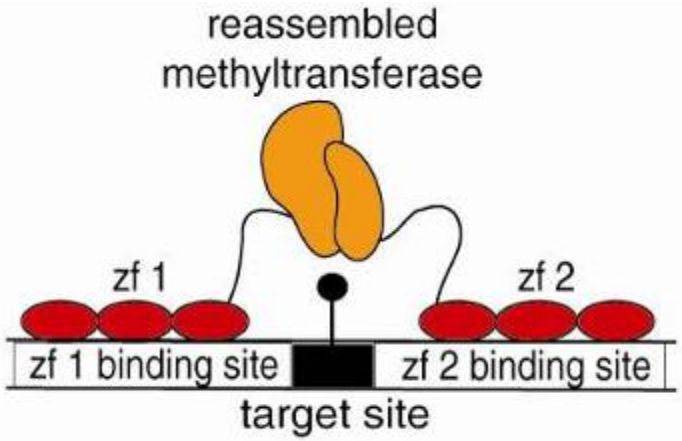
Regulation of Genes



Site-Specific DNA Methylation?





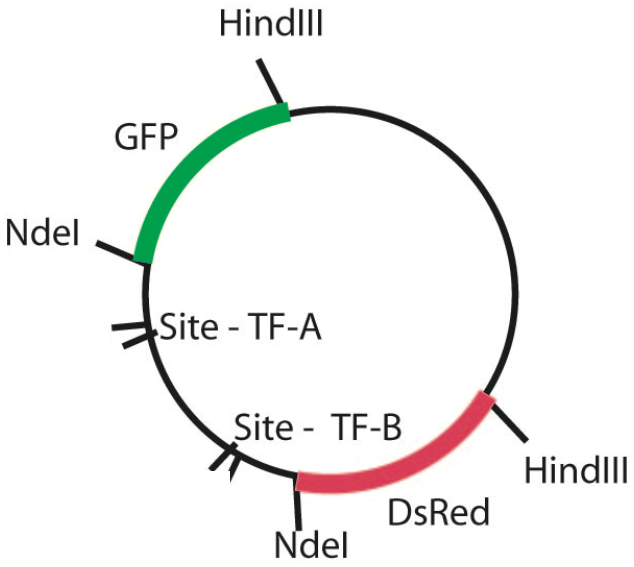
Can partially active split M.HhaI be made site-specific simply by adding specific DNA binding domains?

Term paper – 1

Thought experiment

Objective

To construct a plasmid with desired features



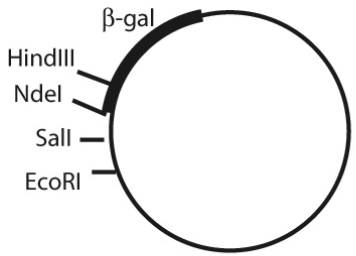
Required construct

Required features

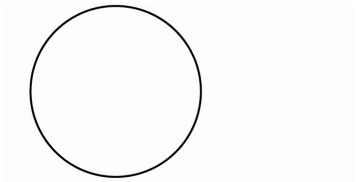
1. Should contain two reporter genes (GFP and RED) between Nde I and HindIII sites

2. Should contain two 12-base pair sites for Transcription Factors A and B between unique sites (so that it could be swapped for testing against either reporter)

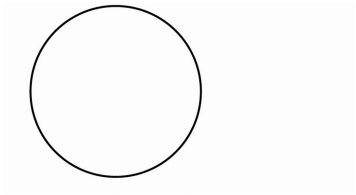
What you have !!



Available Plasmid



some plasmid
which has GFP
(which has a Nde I site)



some plasmid
which has dsRED

12-bp binding sequence for TF-A

12-bp binding sequence for TF-B

Freely available sites –
Spe I, *Sph*I, *Kpn* I, *Sac* I