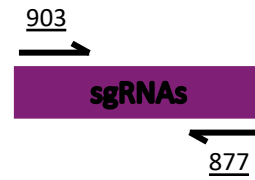


Fragment A: generation of random barcodes associated with random sgRNAs

Step 1a: PCR of constant region



Step 1b: PCR of random sgRNAs



Step 2: PCR of constant region using product of Step 1b as primer



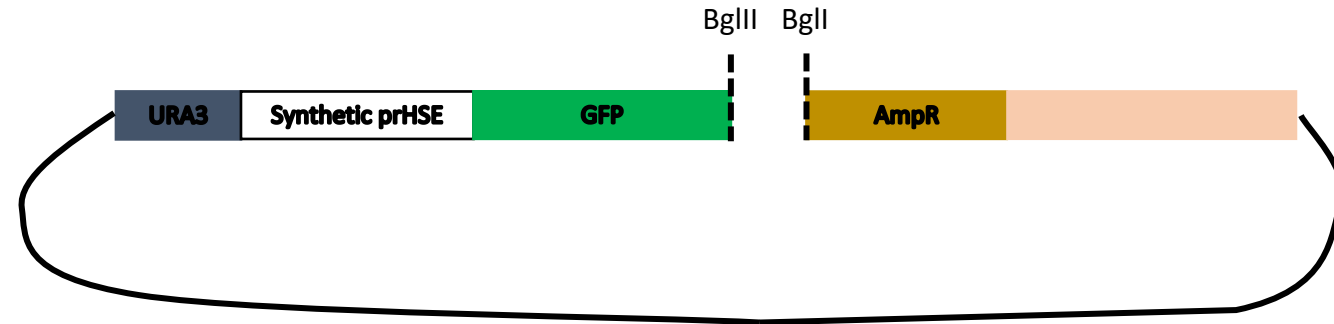
Step 3: PCR to add random barcodes using product of Step 2 as template



Fragment B: PCR to generate constant region that connects Fragments A and C



Fragment C: Generation of backbone via digestion with BglII and BglIII of parental plasmid containing the reporter



Plasmid assembly of Fragments A, B and C via Gibson Assembly:

