DNA Engineering: M1D1 Lab Talk

20.109 (F11)
09.13.11
Module 1 overview

D

5

+ lipofect

48 hours

D

3
Plasmid features

AmpR
oriC

E. coli
MCS
insertion site

Your primers

delta 5:

```
ATG
```

```
TAA
```
Primer Design

1. 17-28 bases
2. 50-60% (GC)
3. Melting Temps should be ~65-80°
4. 3'-ends of primers should not be complementary to each other (why?)
5. Hairpins should be avoided (why?)
6. Check for ‘accidental’ annealing elsewhere in your target.
## Your reactions

<table>
<thead>
<tr>
<th>Component</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primers</td>
<td>Amplify</td>
</tr>
<tr>
<td>Template</td>
<td>Source &amp; deg</td>
</tr>
<tr>
<td>dNTPs, Tag, Mg*B</td>
<td>Master mix</td>
</tr>
</tbody>
</table>
This week in lab

T  LAB PRACTICAL
   Primer Design
   PCR

R  Clean PCR Digest