

## PFU PCR REACTIONS

1. Set up following PCR reaction:

10  $\mu$ l 10x Pfu buffer  
8  $\mu$ l dNTPs (2.5 mM stock)  
2.5  $\mu$ l Primer 1 (100 ng/ $\mu$ l)  
2.5  $\mu$ l Primer 2 (100ng/ $\mu$ l)  
1 $\mu$ l Pfu enzyme  
x $\mu$ l template (use around 10ng)  
y $\mu$ l H<sub>2</sub>O

Make to 100 $\mu$ l with the H<sub>2</sub>O

2. Run reaction in PCR machine. Typical cycles may be:

94°C - 1min  
53°C - 1min  
72°C - 1min 30 sec

for 30 cycles. End on a 10 min 72°C extension and a 4°C soak.

3. Run on gel to check reaction. If cloning, purify PCR product from gel and. A-tail the product as it will be blunt ended.

### NOTES

1. Extension times are normally longer for Pfu than Taq.
2. If amplification doesn't work first time, add extra MgCl<sub>2</sub>.
3. Annealing temperatures will vary.
4. Need to resolve Pfu product on a gel as template will contaminate ligation and will transform a lot better than any ligated target vector