

PFU PCR REACTIONS

1. Set up following PCR reaction:

10 μ l 10x Pfu buffer
8 μ l dNTPs (2.5 mM stock)
2.5 μ l Primer 1 (100 ng/ μ l)
2.5 μ l Primer 2 (100ng/ μ l)
1 μ l Pfu enzyme
 $x\mu$ l template (use around 10ng)
 $y\mu$ l H₂O

Make to 100 μ l with the H₂O

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 MgCl₂.
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