

Site Directed Mutagenesis with Stratagene Pfu Turbo

Procedure:

PCR mixture# 50 μ l:

33.5 μ l ddH₂O

5 μ l 10X Pfu Turbo Reaction mix

2 μ l 2.5 mM dNTP

2.5 μ l DMSO

2 μ l Primer mix (10 μ M each)* (final 0.4 μ M each)

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2 μ l Template DNA (10 pg-200 ng)

1 μ l Pfu turbo DNA Polymerase

PCR Reaction:

Step 1: Heating 95°C for 2 min

Step 2: Heating 95°C for 20s

Step 3: Annealing 55°C for 30s

Step 4: Elongation 68°C for 14 min

Step 5: Repeat Steps 2-4 for 19 cycles

Step 6: Elongation 68°C for 10 min

Step 7: 4°C forever

Step 8: End

After PCR, Transfer 30 μ l to a new tube. incubate each sample with 1 μ l of Dpn I for 1 hr at 37°C. At the mean time, take 5 μ l from the rest of PCR tube to run on agarose gel.

Take 2 μ l of DpnI digested mixture for transformation.

Note:

Perform a control reaction without primers, do PCR and DpnI digestion as the same.