

G3 Megaprimer Generation

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Protocol:

1. Prepared a 50 μL reaction in a PCR tube with the following components:

Component	Volume
10 μM forward primer	2.5 μL
10 μM reverse primer	2.5 μL
10 ng template DNA (G2-D)	3 μL
Q5 High-Fidelity 2X Master Mix	25 μL
Nuclease-free water	17 μL
Total	50 μL

2. Amplified the DNA in the 25 μL reaction with a thermocycler using the following conditions:

Step	Temperature	Time	Number of cycles
Initial denaturation	98 $^{\circ}\text{C}$	30 sec	1
Denaturation	98 $^{\circ}\text{C}$	10 sec	30
Annealing	60 $^{\circ}\text{C}$	30 sec	30
Extension	72 $^{\circ}\text{C}$	3 min 30 sec	30
Final extension	72 $^{\circ}\text{C}$	2 min	1
Hold	10 $^{\circ}\text{C}$	Forever	-

Results: N/A

Conclusion: We need to make more G2-D. This is when we removed the His-tags