Experiment Process

Reaction System

ddH_2O	To 50 µl
2 × Taq Master Mix	25 µl
Primer 1 (10 µM)	2 µl
Primer 2 (10 µM)	2 µl
Template DNA*	x µl

*Optimal reaction concentration varies in different templates. In a 50 µl system, the recommended template usage is as follows:

Animal & Plant Genomic DNA	0.1 - 1 µg
E. coli Genomic DNA	10 - 100 ng
cDNA	1 - 5 µl (≤1/10 of the total volume of PCR system)
Plasmid DNA	0.1 - 10 ng
λDNA	0.5 - 10 ng

Reaction Program

95℃	3 min (Initial Denaturation)[a]	
95℃	15 sec	30 - 35 cycles
60℃[b]	15 sec	
72℃	60 sec/kb	
72℃	5 min (Final Extension)	

a. The condition of initial denaturation is applicable for most amplification reactions and can be adjusted according to the complexity of the template structure. If the template structure is complex, the initial denaturation time can be extended to 5 - 10 min to improve its effect.

b. The annealing temperature needs to be adjusted according to the Tm value of the primer, generally set to be 3 ~ 5℃ lower than the Tm value of the primer; For complex templates, it is necessary to adjust the annealing temperature and extend the extension time to achieve efficient amplification.

Gentaur Molecular Products BVBA
Address: Voortstraat 49, 1910 Kampenhout, Belgium
T: 0032 16 58 90 45 | **E:** info@gentaur.com
Websites: www.gentaur.com | www.maxanim.com